



DoD 4140.1-R

DEPARTMENT OF DEFENSE

DoD Supply Chain Materiel Management Regulation

MAY 23, 2003

**Office of the Deputy Under Secretary of Defense for
Logistics and Materiel Readiness**

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 23 MAY 2003		2. REPORT TYPE		3. DATES COVERED -	
4. TITLE AND SUBTITLE DOD Supply Chain Materiel Management Regulation				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Ofc of the Dep Under Secretary of Defense for Logistics & Material Readiness, Washington, DC, 20301				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 308	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

23 MAY 2003

FOREWORD

This Regulation is reissued under authority of DoD Directive 4140.1, "Materiel Management Policy," January 4, 1993. It prescribes requirements and procedures on the uniform management of DoD materiel. DoD 4140.1-R, "DoD Materiel Management Regulation," May 1998, is hereby canceled.

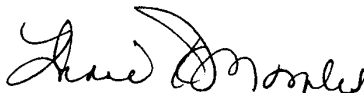
This Regulation applies to the Office of the Secretary of Defense (OSD); the Military Departments; the Joint Chiefs of Staff and the Joint Staff; the Combatant Commands; the Inspector General of the Department of Defense; the Defense Agencies; and the DoD Field Activities (hereafter referred to collectively as "the DoD Components").

This Regulation is effective immediately and mandatory for all the DoD Components.

Send recommended changes to this Regulation to:

Deputy Under Secretary of Defense
(Logistics & Materiel Readiness)
Room 3E808, 3500 Defense Pentagon
Washington, DC 20301-3500

The DoD Components may obtain copies of this Regulation through their own publications channels. Approved for public release; distribution unlimited. Authorized registered users may obtain copies of this Publication from the Defense Technical Information Center, 8725 John J. Kingman Road, Suite 0944, Fort Belvoir, VA 22060-6218. Other Federal Agencies and the public may obtain copies from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. Copies are also available via the World Wide Web at: <http://www.dtic.mil/whs/directives/corres/pub1.html>.



Diane K. Morales
Deputy Under Secretary of Defense
(Logistics & Materiel Readiness)

TABLE OF CONTENTS

	<u>Page</u>
FOREWORD	2
TABLE OF CONTENTS	3
TABLES	6
REFERENCES	7
ABBREVIATIONS AND/OR ACRONYMS	10
CHAPTER 1 - GUIDING PRINCIPLES	16
C1.1. PURPOSE	16
C1.2. DoD SUPPLY CHAIN	16
C1.3. DoD SUPPLY CHAIN MATERIEL MANAGEMENT GOALS	17
C1.4. SUPPLY CHAIN PROCESSES	19
C1.5. SUPPLY CHAIN METRICS	21
CHAPTER 2 - PLAN	23
C2.1. DEMAND/SUPPLY PLANNING	23
C2.2. PROVISIONING	25
C2.3. ITEM CLASSIFICATION AND CODING FOR STOCKAGE REQUIREMENTS	30
C2.4. ITEM SUPPORT GOALS	32
C2.5. FORECASTING CUSTOMER DEMAND	34
C2.6. MATERIEL STOCKAGE COMPUTATIONS	37
C2.7. SECONDARY ITEM WAR RESERVE REQUIREMENTS	54
C2.8. MATERIEL RETENTION	55
C2.9. ITEM REDUCTION	58
CHAPTER 3 - SOURCE	60
C3.1. SOURCING AND MATERIEL ACQUISITION	60
C3.2. MATERIEL SUPPORT ALTERNATIVES	61
C3.3. ACQUISITION INTERFACES	69
C3.4. INTEGRATED MATERIEL MANAGEMENT	72
C3.5. QUALITY PROGRAMS	73
C3.6. DIMINISHING MANUFACTURING SOURCES AND MATERIEL SHORTAGES (DMSMS)	75
C3.7. MANAGEMENT OF ON-ORDER ASSETS	79
C3.8. RECEIPT PROCESSING	81

TABLE OF CONTENTS, Continued

CHAPTER 4 - MAKE/MAINTAIN	83
C4.1. MAKE/MAINTAIN MATERIEL	83
C4.2. MAINTENANCE INTERFACES	84
C4.3. BUYING FROM SUPPLIERS	86
C4.4. CLS AND DVD INTERFACES	87
C4.5. SETS, KITS, AND OUTFITS	89
CHAPTER 5 - DELIVER	90
C5.1. END-TO-END DISTRIBUTION	90
C5.2. STOCK POSITIONING	91
C5.3. REQUISITIONING	94
C5.4. MATERIEL ISSUE PROCESSING	100
C5.5. LATERAL REDISTRIBUTION OF ASSETS	101
C5.6. DISTRIBUTION OPERATIONS	104
C5.7. ITEM ACCOUNTABILITY/CONTROL AND STEWARDSHIP	105
C5.8. INTRANSIT ASSET VISIBILITY	124
C5.9. HAZARDOUS MATERIALS	126
C5.10. MATERIEL DISPOSITION	128
C5.11. CONTROL OF ACCESS TO DoD MATERIEL INVENTORIES REQUIRED BY DEFENSE CONTRACTS	130
CHAPTER 6 - RETURN	133
C6.1. MATERIEL RETURNS	133
C6.2. RETURN OF DEFECTIVE MATERIEL	135
C6.3. RETURN OF MATERIEL FOR MAINTENANCE, REPAIR, OR OVERHAUL	136
C6.4. MATERIEL RETURNS PROGRAM FOR RETAIL ASSETS	138
CHAPTER 7 - SUPPORTING TECHNOLOGIES	140
C7.1. SUPPLY CHAIN MATERIEL MANAGEMENT SYSTEMS	140
C7.2. AUTOMATED IDENTIFICATION TECHNOLOGY (AIT)	142
C7.3. SUPPLY CHAIN ANALYTICAL CAPABILITIES	143
C7.4. PRODUCT SUPPORT DATA	144

TABLE OF CONTENTS, Continued

CHAPTER 8 - LOGISTICS PROGRAMS AND SYSTEMS	147
C8.1. CATALOGING	147
C8.2. NEW CLOTHING AND TEXTILE ITEMS	150
C8.3. SPARE PARTS BREAKOUT PROGRAM	153
C8.4. PRICE CHALLENGE AND PROCE VERIFICATION PROGRAM	154
C8.5. DoD AVIATION CRITICAL SAFETY ITEM (CSI)/FLIGHT SAFETY CRITICAL AIRCRAFT PART (FSCAP) PROGRAM	156
C8.6. MANAGEMENT SYSTEM OF LOGISTICS STANDARD SYSTEMS AND DATA	161
C8.7. PACKAGING	168
C8.8. UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)	173
CHAPTER 9 - SPECIAL REQUIREMENTS	176
C9.1. STRATIFICATION	176
C9.2. SUPPLY SYSTEM INVENTORY REPORT (SSIR)	177
C9.3. AMMUNITION STRATIFICATION, REPORTING, AND CROSS LEVELING	181
C9.4. LOGISTICS SUPPORT OF U.S. NON-DoD OR NON-GOVERNMENT, AGENCIES, AND INDIVIDUALS IN OVERSEAS MILITARY COMMANDS	186
C9.5. EXCHANGE OR SALE OF NONEXCESS PERSONAL PROPERTY	187
APPENDICES	
AP1. DEFINITIONS FREQUENTLY USED IN DoD ISSUANCES	190
AP2. PROVISIONING DATA AND ORGANIC REQUIREMENTS PROCEDURES	213
AP3. RETAIL REASON FOR STOCKAGE CATEGORY CODES	217
AP4. ESSENTIALITY MATRIX	219
AP5. COST ESTIMATING	222
AP6. REPAIR CYCLE TIME	226
AP7. AGREEMENT BETWEEN THE DEPARTMENT OF DEFENSE AND THE GENERAL SERVICES ADMINISTRATION GOVERNING SUPPLY MANAGEMENT RELATIONSHIPS UNDER THE NATIONAL SUPPLY SYSTEM	230
AP8. TIME DEFINITE DELIVERY STANDARDS	242
AP9. UMMIPS RESPONSIBILITIES	249
AP10. CHARTER FOR THE DoD UNIQUE ITEM TRACKING COMMITTEE (UITC)	258
AP11. CHARTER FOR THE DoD JOINT SMALL ARMS COORDINATING GROUP (JSACG)	261
AP12. CHARTER FOR THE DoD JOINT PHYSICAL INVENTORY WORKING GROUP (JPIWG)	264
AP13. DLMS AND DLSS RESPONSIBILITIES	266
AP14. LEVELS OF PROTECTION	274
AP15. CHARTER FOR THE DEFENSE PACKAGING POLICY GROUP (DPPG)	276
AP16. INSTRUCTIONS FOR ELECTRONIC SSIR REPORTING	284
AP17. INDEX	286

TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
AP8.T1.	UMMIPS Time Standards for Transportation Priority 1	245
AP8.T2.	UMMIPS Time Standards for Transportation Priority 2	247
AP8.T3.	UMMIPS Time Standards for Transportation Priority 3	248
AP16.T1.	SSIR Spreadsheet Header Data	284
AP16.T2.	SSIR Spreadsheet Line Item Data	285

REFERENCES

- (a) [DoD Directive 4140.1](#), "Materiel Management Policy," January 4, 1993
- (b) Sections 2451 through 2458, 2572, and 2576 of title 10, United States Code
- (c) DoD 4100.38-M, "Department of Defense Provisioning and Other Preprocurement Screening Manual," November 1983
- (d) MIL-PRF-49506, "Performance Specification Logistics Management Information," November 11, 1996, located at website:
<http://131.82.253.19/docimages/0001/67/51/49506.PD5>
- (e) MIL-HDBK-502, "Department of Defense Handbook Acquisition Logistics," May 30, 1997
- (f) DoD 4140.27-M, "Shelf-Life Item Management Manual," September 26, 1997
- (g) DoD 4000.25-2-M, "Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP)," September 19, 2001
- (h) DoD 7000.14-R, "Department of Defense Financial Management Regulations (FMRs)," dates vary
- (i) [DoD Directive 3110.6](#), "War Reserve Materiel Policy," November 9, 2000
- (j) [DoD 4120.24-M](#), "DoD Standardization Program (DSP) Policies and Procedures," March 2000
- (k) [DoD 4140.32-M](#), "Defense Inactive Item Program," August 1992
- (l) Defense FAR Supplement, Part 208, "Required Sources of Supplies and Services," current edition
- (m) [DoD Directive 5000.1](#), "The Defense Acquisition System," October 23, 2000
- (n) DoD 4140.26-M, "Defense Integrated Materiel Management Manual for Consumable Items," May 1997
- (o) Federal Acquisition Regulation, Part 46, "Quality Assurance," current edition
- (p) Defense FAR Supplement, Part 246, "Quality Assurance, current edition
- (q) DoD 4500.9-R "Defense Transportation Regulation," Part II, "Cargo Movement," April 1996
- (r) DoD 4000.25-1-M, "Military Standard Requisitioning and Issue Procedures (MILSTRIP)," November 2000
- (s) Sections 287 and 2318 of title 22, United States Code
- (t) DoD 4000.25-6-M, "Department of Defense Activity Address Directory (DoDAAD), Part I," "Activity Address Code Sequence," April 1996
- (u) DoD 4000.25-6-M, "Department of Defense Activity Address Directory (DoDAAD), Part II," "Zip Code Sequence," April 1996
- (v) DoD 4000.25-6-M, "Department of Defense Activity Address Directory (DoDAAD), Part III," "Civil Agency Addresses," April 1996

- (w) DoD 4000.25-8-M, "Military Assistance Program Address Directory (MAPAD) System," July, 1995
- (x) DoD 4000.25-M, "Defense Logistics Management System (DLMS), February 1996
- (y) DoD 4000.25-7-M, "Military Standard Billing System (MILSBILLS)," January 1985
- (z) [DoD Directive 5010.38](#), "Management Control (MC) Program," August 26, 1996
- (aa) [DoD 5100.76-M](#), "Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives," August 12, 2000
- (ab) NTISSI No. 4001, "Controlled Cryptographic Items," March 14, 1985
- (ac) Federal Acquisition Regulation, Part 45, "Government Property," current edition
- (ad) FED-STD-793A, "Federal Standard Depot Storage Standards," October 15, 1998
- (ae) [DoD 5200.8-R](#), "Physical Security Program," May 13, 1991
- (af) [DoD Directive 5210.63](#), "Security of Nuclear Reactors and Special Nuclear Materials," April 6, 1990
- (ag) [DoD 4160.21-M](#), "Defense Reutilization and Marketing Manual," August 18, 1997
- (ah) [DoD 6055.9-STD](#), "DoD Ammunition and Explosives Safety Standards," July 1, 1999
- (ai) FED-STD-313 D, "Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities," April 3, 1996
- (aj) Title 22, Code of Federal Regulations, Part 121, "The United States Munitions List," current edition
- (ak) Title 15, Code of Federal Regulations, Part 774, "Commerce Control List," current edition
- (al) DoD 4160.21-M-1, "Defense Demilitarization Manual," October 1991
- (am) Sections 481(c), 484(j)(2), and 512(a) of title 40, United States Code
- (an) Section 3710(i) of title 15, United States Code
- (ao) [DoD Instruction 5535.8](#), "DoD Technology Transfer (T2) Program," May 14, 1999
- (ap) ISO/IEC 15434, "Information Technology -- Transfer Syntax for High Capacity ADC Media," October 1, 1999
- (aq) ISO/IEC 15418, "Information Technology -- EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance," December 1, 1999
- (ar) ANSI NCITS-256:2001, "Radio Frequency Identification (RFID) Technology," February 26, 2001
- (as) IEEE 801-11 series, "Wireless Local Area Networks," dates vary by individual standard
- (at) DoD 4100.39-M, "Federal Logistics Information System (FLIS) Procedures Manual," dates vary
- (au) NATO Standardization Agreement (STANAG) 3150, "Codification of Equipment - Uniform System of Supply Classification," July 1989
- (av) NATO Standardization Agreement (STANAG) 3151, "Codification of Equipment - Uniform System of Item Identification," July 1989
- (aw) Allied Codification Publication, NATO Manual on Codification, July 1989

- (ax) DoD 4000.25-7-M-S-1, "Fund Code Supplement to MILSBILLS," February 1994
- (ay) [DoD Directive 8190.1](#), "DoD Logistics Use of Electronic Data Interchange (EDI) Standards," May 5, 2000
- (az) DoD 4000.25-1-S1, "MILSTRIP Routing Identifier and Distribution Codes," June 1996
- (ba) DoD 4000.25-5-M, "Military Standard Contract Administration Procedures (MILSCAP)," March 1993
- (bb) DoD 4000.25-7-M-S-1, "Fund Code Supplement to MILSBILLS," February 25, 1994
- (bc) DoD 4000.25-10-M, "Defense Automatic Addressing System," April 1985
- (bd) [DoD Directive 8320.1](#), "DoD Data Administration," September 26, 1991
- (be) Federal Acquisition Regulation, Part 12, "Acquisition of Commercial Items," current edition
- (bf) Section 403 of title 44, United States Code
- (bg) [DoD Instruction 6055.1](#), "DoD Safety and Occupational Health (SOH) Program," August 19, 1998
- (bh) Title 49, Code of Federal Regulations, Part 173, "General Requirements for Shipments and Packaging," current edition
- (bi) [DoD Directive 4715.1](#), "Environmental Security," February 24, 1996
- (bj) [DoD Instruction 4715.6](#), "Environmental Compliance," April 24, 1996
- (bk) Sections 1901 through 1915 of title 33, United States Code
- (bl) [DoD Instruction 4140.61](#), "Customer Wait Time and Time Definite Delivery," December 14, 2000
- (bm) [DoD 4140.1-M](#), "Secondary Item Stratification Manual," June 9, 1995
- (bn) DoD 5160.65-M, "Single Manager for Conventional Ammunition (Implementing Joint Conventional Ammunition Policies and Procedures)," April 1989
- (bo) [DoD Instruction 3000.4](#), "Capabilities-Based Munitions Requirements (CBMR) Process," August 10, 2001
- (bp) Title 46, Code of Federal Regulations, Chapter 101 (Federal Property Management Regulations), current edition
- (bq) Joint Pub 1-02, "Department of Defense Dictionary of Military and Associated Terms," March 23, 1994
- (br) [DoD Directive 5160.65](#), "Single Manager for Conventional Ammunition (SMCA)," March 8, 1995
- (bs) [DoD Directive 4400.1](#), "Defense Production Act Programs," October 12, 2001
- (bt) CJCS Instruction 5113.01B, "Charter of the Counterterrorist Joint Task Force," May 31, 2000
- (bu) [DoD 5025.1-M](#), "DoD Directive System Procedures," March 5, 2003

AL1. ABBREVIATIONS AND/OR ACRONYMS

AL1.1.1.	<u>AAO</u>	Approved Acquisition Objective
AL1.1.2.	<u>AD</u>	Airworthiness Directive
AL1.1.3.	<u>ADUSD(SCI)</u>	Assistant Deputy Under Secretary of Defense (Supply Chain Integration)
AL1.1.4.	<u>AFMC</u>	Air Force Materiel Command
AL1.1.5.	<u>AIT</u>	Automated Item Identification
AL1.1.6.	<u>ALT</u>	Administrative Lead Time
AL1.1.7.	<u>AMC-R</u>	Army Materiel Command Regulation
AL1.1.8.	<u>AMXED</u>	Office of the Executive Director for Conventional Ammunition
AL1.1.9.	<u>ANSI</u>	American National Standards Institute
AL1.1.10.	<u>AR</u>	Army Regulation
AL1.1.11.	<u>AWC</u>	Awaiting Carcasses
AL1.1.12.	<u>AWM</u>	Awaiting Maintenance
AL1.1.13.	<u>AWP</u>	Awaiting Parts
AL1.1.14.	<u>BOM</u>	Bill of Materials
AL1.1.15.	<u>CAGE</u>	Contractor and Government Entity
AL1.1.16.	<u>CCI</u>	Contractor Cryptographic Item
AL1.1.17.	<u>CCP</u>	Container Consolidation Point
AL1.1.18.	<u>CD-ROM</u>	Compact Disk - Read Only Memory
AL1.1.19.	<u>CJCS</u>	Chairman of the Joint Chiefs of Staff
AL1.1.20.	<u>CLS</u>	Commercial Logistics Support
AL1.1.21.	<u>CLSSA</u>	Cooperative Logistics Supply Support Arrangements
AL1.1.22.	<u>COSIS</u>	Care of Supplies in Storage
AL1.1.23.	<u>COE</u>	Common Operating Environment
AL1.1.24.	<u>COTS</u>	Commercial-Off-The-Shelf
AL1.1.25.	<u>CRMS</u>	Contingency Retention Munitions Stock
AL1.1.26.	<u>CRS</u>	Contingency Retention Stock
AL1.1.27.	<u>CSIS</u>	Central Secondary Item Stratification
AL1.1.28.	<u>CWT</u>	Customer Wait Time
AL1.1.29.	<u>DAAS</u>	Defense Automatic Addressing System
AL1.1.30.	<u>DAASC</u>	Defense Automatic Addressing Center
AL1.1.31.	<u>DCMA</u>	Defense Contract Management Agency

AL1.1.32. <u>DFARS</u>	Defense Federal Acquisition Regulation Supplement
AL1.1.33. <u>DIIP</u>	Defense Inactive Item Program
AL1.1.34. <u>DLA</u>	Defense Logistics Agency
AL1.1.35. <u>DLAI</u>	DLA Instruction
AL1.1.36. <u>DLAR</u>	DLA Regulation
AL1.1.37. <u>DLMS</u>	Defense Logistics Management System
AL1.1.38. <u>DLMSO</u>	Defense Logistics Management Standards Office
AL1.1.39. <u>DLIS</u>	Defense Logistics Information Service
AL1.1.40. <u>DLSS</u>	Defense Logistics Standard System
AL1.1.41. <u>GCA</u>	Government Contracting Activity
AL1.1.42. <u>DMSMS</u>	Diminishing Manufacturing Sources and Material Shortages
AL1.1.43. <u>DoDAAC</u>	Department of Defense Activity Address Code
AL1.1.44. <u>DoDAAD</u>	Department of Defense Activity Address Directory (Parts I through III, references (a) through (c))
AL1.1.45. <u>DoDSASP</u>	DoD Small Arms Serialization Program
AL1.1.46. <u>DPPG</u>	Defense Packaging Policy Group
AL1.1.47. <u>DRMO</u>	Defense Reutilization and Marketing Group
AL1.1.48. <u>DRMS</u>	Defense Reutilization and Marketing Service
AL1.1.49. <u>DSCA</u>	Defense Security Cooperation Agency
AL1.1.50. <u>DUSD(L&MR)</u>	Deputy Under Secretary of Defense for Logistics and Materiel Readiness
AL1.1.51. <u>DVD</u>	Direct Vendor Delivery
AL1.1.52. <u>DX</u>	Priority Rating Symbol (Highest National Defense Urgency)
AL1.1.53. <u>EDFP</u>	Engineering Data for Provisioning
AL1.1.54. <u>EDI</u>	Electronic Data Interchange
AL1.1.55. <u>EMALL</u>	Electronic Mall
AL1.1.56. <u>EOQ</u>	Economic Order Quantity

AL1.1.57. <u>ERMS</u>	Economic Retention Munitions Stock
AL1.1.58. <u>ERP</u>	Enterprise Resource Planning
AL1.1.59. <u>ERS</u>	Economic Retention Stock
AL1.1.60. <u>ESA</u>	Engineering Support Activity
AL1.1.61. <u>F/AD</u>	Force or Activity Designator
AL1.1.62. <u>FAA</u>	Federal Aviation Administration
AL1.1.63. <u>FAR</u>	Federal Acquisition Regulations
AL1.1.64. <u>FDAd</u>	Functional Data Administrator
AL1.1.65. <u>FED-STD</u>	Federal Standard
AL1.1.66. <u>FLIS</u>	Federal Logistics Information System
AL1.1.67. <u>FMS</u>	Foreign Military Sales
AL1.1.68. <u>FSC</u>	Federal Supply Classification
AL1.1.69. <u>FSCAP</u>	Flight Safety Critical Aircraft Part
AL1.1.70. <u>FSCG</u>	Federal Supply Classification Group
AL1.1.71. <u>GCSS</u>	Global Combat Support System
AL1.1.72. <u>GIDEP</u>	Government-Industry Data Exchange System
AL1.1.73. <u>GFE</u>	Government-Furnished Equipment
AL1.1.74. <u>GFM</u>	Government-Furnished Materiel
AL1.1.75. <u>GSA</u>	Government Services Administration
AL1.1.76. <u>HMIRS</u>	Hazardous Materials Information Resource System
AL1.1.77. <u>ICP</u>	Inventory Control Point
AL1.1.78. <u>ICS</u>	Interim Contractor Support
AL1.1.79. <u>IDIQ</u>	Indefinite Delivery and Indefinite Quantity
AL1.1.80. <u>IEC</u>	International Electrotechnical Commission
AL1.1.81. <u>IEEE</u>	Institute of Electrical and Electronics Engineers, Inc.
AL1.1.82. <u>IKE</u>	Integrated Knowledge Environment
AL1.1.83. <u>IMC</u>	Item Management Code
AL1.1.84. <u>IMM</u>	Integrated Materiel Manager
AL1.1.85. <u>ISO</u>	International Organization for Standardization
AL1.1.86. <u>IT</u>	Information Technology
AL1.1.87. <u>I&S</u>	Interchangeable and Substitutable
AL1.1.88. <u>JPIWG</u>	Joint Physical Inventory Working Group
AL1.1.89. <u>JSACG</u>	Joint Small Arms Coordinating Group
AL1.1.90. <u>LANs</u>	Local Area Networks
AL1.1.91. <u>LMARS</u>	Logistics Metric Analysis Reporting System
AL1.1.92. <u>LOT</u>	Life-Of-Type

AL1.1.93. <u>LSIS</u>	Local Secondary Item Statification
AL1.1.94. <u>MAPAC</u>	Military Assistance Program Address Code
AL1.1.95. <u>MAPAD</u>	Military Assistance Program Address Directory
AL1.1.96. <u>MCA</u>	Materiel Control Activity
AL1.1.97. <u>MCO</u>	Marine Corps Order
AL1.1.98. <u>MIA</u>	Missing In Action
AL1.1.99. <u>MIL-HDBK</u>	Military Handbook
AL1.1.100. <u>MIL-PRF</u>	Military Performance Specification
AL1.1.101. <u>MIL-STD</u>	Military Standard
AL1.1.102. <u>MILSPEC</u>	Military Specification
AL1.1.103. <u>MILSBILLS</u>	Military Standard Billing System
AL1.1.104. <u>MILSCAP</u>	Military Standard Contract Administration Procedures
AL1.1.105. <u>MILSTAMP</u>	Military Standard Transportation And Movement Procedures
AL1.1.106. <u>MILSTRAP</u>	Military Standard Transaction Reporting and Accounting Procedures
AL1.1.107. <u>MILSTRIP</u>	Military Standard Requisitioning and Issue Procedures
AL1.1.108. <u>MME</u>	Military Mission Essentiality
AL1.1.109. <u>MRO</u>	Materiel Release Order
AL1.1.110. <u>MRP</u>	Maintenance Requirements Planning
AL1.1.111. <u>MSDS</u>	Materiel Safety Data Sheet
AL1.1.112. <u>NASA</u>	National Aeronautics and Space Administration
AL1.1.113. <u>NATO</u>	North Atlantic Treaty Organization
AL1.1.114. <u>NCITS</u>	National Committee for Information Technology Standards
AL1.1.115. <u>NDI</u>	Nondevelopmental Item
AL1.1.116. <u>NIIN</u>	National Item Identification Number
AL1.1.117. <u>NIMACS</u>	Nuclear Inventory Management and Cataloging System
AL1.1.118. <u>NIMSR</u>	Nonconsumable Item Materiel Support Requests
AL1.1.119. <u>NMC</u>	Not Mission Capable
AL1.1.120. <u>NOCO</u>	Nuclear Ordnance Cataloging Office
AL1.1.121. <u>NSN</u>	National Stock Number

AL1.1.122. <u>NTISSI</u>	National Telecommunications and Information Systems Security Instruction
AL1.1.123. <u>NUIT</u>	National-level Unique Item Tracking
AL1.1.124. <u>OL</u>	Operating Level
AL1.1.125. <u>OMC</u>	Optical Memory Card
AL1.1.126. <u>O&M</u>	Operations and Maintenance
AL1.1.127. <u>OSD</u>	Office of the Secretary of Defense
AL1.1.128. <u>OST</u>	Order and Shipping Time
AL1.1.129. <u>OSTL</u>	Order and Shipping Time Level
AL1.1.130. <u>PBL</u>	Performance-Based Logistics
AL1.1.131. <u>PICP</u>	Physical Inventory Control Program
AL1.1.132. <u>PTL</u>	Production Lead Time
AL1.1.133. <u>PMRP</u>	Precious Metals Recovery Program
AL1.1.134. <u>POD</u>	Port OF Debarkation
AL1.1.135. <u>POE</u>	Port OF Embarkation
AL1.1.136. <u>POM</u>	Program Objective Memorandum
AL1.1.137. <u>POW</u>	Prisoner Of War
AL1.1.138. <u>PR/DS</u>	Potential Reutilization and/or Disposal Stock
AL1.1.139. <u>PRC</u>	Process Review Committee
AL1.1.140. <u>PSA</u>	Principal Staff Assistant
AL1.1.141. <u>PSI</u>	Product Support Integrator
AL1.1.142. <u>PTD</u>	Provisioning Technical Documentation
AL1.1.143. <u>RBS</u>	Readiness-Based Sparing
AL1.1.144. <u>RCL</u>	Repair Cycle Level
AL1.1.145. <u>RDD</u>	Required Delivery Date
AL1.1.146. <u>RDT&E</u>	Research, Development, Test, and Engineering
AL1.1.147. <u>RFID</u>	Radio Frequency Identification
AL1.1.148. <u>RRMS</u>	Requirement-Related Munitions Stock
AL1.1.149. <u>RSC</u>	Reason for Stock Category
AL1.1.150. <u>SDR</u>	Supply Discrepancy Report
AL1.1.151. <u>SICA</u>	Secondary Inventory Control Activity
AL1.1.152. <u>SL</u>	Safety Level
AL1.1.153. <u>SLES</u>	Shelf-Life Extension System
AL1.1.154. <u>SMCA</u>	Single Manager for Conventional Ammunition
AL1.1.155. <u>SMPT</u>	School of Military Packaging Technology

AL1.1.156. <u>SMR</u>	Source, Maintenance, and Recoverability
AL1.1.157. <u>SPR</u>	Special Program Requirement
AL1.1.158. <u>SSIR</u>	Supply System Inventory Report
AL1.1.159. <u>SSR</u>	Supply Support Request
AL1.1.160. <u>TAV</u>	Total Asset Visibility
AL1.1.161. <u>TCN</u>	Transportation Control Number
AL1.1.162. <u>TM</u>	Technical Manual
AL1.1.163. <u>TMR</u>	Total Munitions Requirements
AL1.1.164. <u>TRC</u>	Technical Review Committee
AL1.1.165. <u>U.S.C.</u>	United States Code
AL1.1.166. <u>UII</u>	Unique Item Identifier
AL1.1.167. <u>UIT</u>	Unique Item Tracking
AL1.1.168. <u>UITC</u>	Unique Item Tracking Committee
AL1.1.169. <u>UMMIPS</u>	Uniform Materiel Movement and Issue Priority System
AL1.1.170. <u>UND</u>	Urgency of Need Designator
AL1.1.171. <u>USCG</u>	United States Coast Guard
AL1.1.172. <u>USSOCOM</u>	United States Special Operations Command
AL1.1.173. <u>USTRANSCOM</u>	United States Transportation Command

C1. CHAPTER 1

GUIDING PRINCIPLES

C1.1. PURPOSE

C1.1.1. This Regulation implements DoD Directive 4140.1 (reference (a)) and establishes requirements and procedures for DoD materiel managers and others who need to work within or with the DoD supply system.

C1.1.2. This Regulation provides materiel management guidance for:

C1.1.2.1. Developing materiel requirements based on customer expectations while minimizing the DoD investment in inventories;

C1.1.2.2. Selecting support providers on the basis of best value;

C1.1.2.3. Determining how best to position and deliver materiel to satisfy highly variable readiness and combat sustainment needs in a variety of unique and demanding environments; and

C1.1.2.4. Executing other supply chain functions and programs, some of which are unique to the Department.

C1.1.3. To provide for effective and efficient end-to-end materiel support, the Regulation:

C1.1.3.1. Establishes the customer as the foundation driving all materiel management decision-making;

C1.1.3.2. Promulgates best business practices in the area of materiel management; and

C1.1.3.3. Institutes procedures that meet all materiel management statutory requirements.

C1.2. DoD SUPPLY CHAIN

C1.2.1. To supply materiel and logistics services to DoD units throughout the world, the DoD Components maintain a supply chain consisting of weapon system support contractors, retail supply activities, distribution depots, transportation networks

including contracted carriers, Military Service and Defense Logistics Agency (DLA) integrated materiel managers (IMMs), weapon system program offices, commercial distributors and suppliers including manufacturers, commercial and organic maintenance facilities, and other logistics activities (e.g., engineering support activities (ESAs), testing facilities, cataloging services, reutilization and marketing offices).

C1.2.2. This Regulation presents DoD logistics personnel with a process-based view of materiel management policy within a supply chain framework. This structure underscores the fundamental changes and collaborative initiatives that are occurring to meet warfighter sustainment needs and the operational requirements of the National Military Strategy.

C1.2.3. Those needs and requirements required that the DoD Components provide supplies and services that support:

C1.2.3.1. Rapid power projection;

C1.2.3.2. Improved readiness through performance-based logistics; and

C1.2.3.3. World-class standards for customer responsiveness. The guidance in this Regulation encourages the DoD Components to:

C1.2.3.3.1. Transform their support of weapons systems through total life-cycle management, increased partnering, and adoption of modern information technologies.

C1.2.3.3.2. Establish end-to-end processes that are focused on maximizing customer service or warfighter support.

C1.2.3.3.3. Implement contemporary business systems and practices that enable the integration of people, information, and processes.

C1.3. DoD SUPPLY CHAIN MATERIEL MANAGEMENT GOALS

C1.3.1. Policy from Directive. According to DoD Directive 4140.1 (reference (a)), all DoD Components shall:

C1.3.1.1. Structure their materiel management to provide responsive, consistent, and reliable support to the war fighter during peacetime and war. That support should be dictated by performance agreements with customers to the furthest extent. For weapon system materiel, those agreements should be negotiated with

weapon system users or their representatives as part of a performance-based logistics (PBL) strategy. For other materiel, the agreements should be negotiated between support providers and customer representatives. This structuring of support should be done within the context of total life-cycle systems management.

C1.3.1.2. Size their secondary item inventories to minimize the DoD investment while providing the inventory needed to support peacetime and war requirements.

C1.3.1.3. Consider all costs associated with materiel management, including acquisition, transportation, storage, maintenance, and disposal in making best value logistics materiel and service provider decisions central to total life-cycle systems management.

C1.3.1.4. Implement materiel management functions with commercial off-the-shelf (COTS) systems or DoD standard data systems. This goal encompasses the implementation of continuous supply chain management capabilities, within an integrated knowledge environment.

C1.3.1.5. Maintain materiel control and visibility of the secondary inventory down to and including retail inventories. This involves incorporating commercial and Government best business practices to continuously improve DoD supply chain processes and instill user confidence in the materiel management system.

C1.3.2. Procedures. To satisfy the above policies, the DoD Components shall:

C1.3.2.1. Use performance-based logistics (PBL) strategies and performance agreements between war fighters and program managers and between support providers (organic and/or commercial) and customer representatives to structure supply chain processes and systems to provide required support in a flexible and timely manner during crises and joint operations.

C1.3.2.2. Focus processes on satisfying operational customer requirements at the point of need.

C1.3.2.3. Link customers directly to the source of support through the collaborative planning process.

C1.3.2.4. Balance the use of all available logistics resources to accomplish timely and quality delivery of customer-determined materiel and service requirements at the lowest cost.

C1.3.2.5. Measure total supply chain performance based on timely and cost-effective delivery of materiel and logistics services to operational customers.

C1.3.2.6. Make maximum, effective use of competitive, global commercial and organic supply chain capabilities.

C1.3.2.7. Accomplish common requirements cooperatively whenever practical.

C1.3.2.8. Implement consistent structure, content, and presentation of logistics information, particularly when supporting common interfaces among the Military Services, Defense Agencies, and international partners.

C1.3.2.9. As early as possible in the acquisition cycle of a new program, work with the acquisition program manager and product support integrator to address logistics requirements and related supply chain costs (i.e., materiel, storage, transportation, etc.) within the context of total life-cycle systems management.

C1.3.2.10. Include all logistics requirements in planning and program baselines and develop them initially without any internally or externally imposed financial constraints.

C1.3.2.11. Implement and use the concept of information stewardship (e.g., shared data).

C1.3.2.12. Provide for visibility of the quantity, condition, and location of in-storage, in-process, and intransit assets throughout the DoD supply chain and visibility of orders placed on organic and commercial sources of supply.

C1.3.2.13. Provide effective, up-to-date, training and supporting technology to logistics organizations and personnel.

C1.4. SUPPLY CHAIN PROCESSES

C1.4.1. Requirements

C1.4.1.1. The DoD Components shall use the supply chain operational reference processes of Plan, Source, Maintain/Make, Deliver, and Return as a framework for developing, improving, and conducting materiel management activities to satisfy customer support requirements developed collaboratively with the support providers.

C1.4.1.2. The DoD Components shall:

C1.4.1.2.1. Under the Plan process, conduct demand and supply planning that optimizes supply chain resources to meet established support strategies and employs, to the furthest extent, collaboration between support providers and their customers.

C1.4.1.2.2. Under the Source process, perform materiel sourcing and acquisition and manage their sourcing infrastructure applying total life-cycle support management where applicable.

C1.4.1.2.3. Under the Maintain/Make process, seek to optimize the relationships between materiel managers and commercial sources of supply and between materiel managers and activities performing production, manufacturing, repair, modification, overhaul, and testing functions at organic or private sector facilities or through public and private partnerships at those facilities.

C1.4.1.2.4. Under the Deliver process, manage orders, distribution depots and other storage locations, transportation networks, and other delivery infrastructure.

C1.4.1.2.5. Under the Return process, administer customer returns of defective materiel, excess materiel, and materiel requiring maintenance, repair, or overhaul.

C1.4.2. Procedures

C1.4.2.1. Specific requirements and procedures on the Plan process are in Chapter 2 of this Regulation.

C1.4.2.2. Specific requirements and procedures on the Source process are in Chapter 3 of this Regulation.

C1.4.2.3. Specific requirements and procedures on the Maintain/Make process are in Chapter 4 of this Regulation.

C1.4.2.4. Specific requirements and procedures on the Deliver process are in Chapter 5 of this Regulation.

C1.4.2.5. Specific requirements and procedures on the Return process are in Chapter 6 of this Regulation.

C1.4.2.6. Definitions relevant to supply chain materiel management are in Appendix 1.

C1.4.2.7. The DoD Components shall adopt and/or adapt best commercial business practices when such practices will contribute to increased supply chain performance and/or reduced total life-cycle systems cost. Processes and technologies, such as enterprise resource planning (ERP), automated identification technology (AIT), automated planning system, material requirements planning (MRP), and balanced score card, represent business practices that are either referenced in or have potential application to the supply chain procedures presented in this Regulation.

C1.5. SUPPLY CHAIN METRICS

C1.5.1. Requirements. To ensure efficient and effective supply chain management, the DoD Components shall use metrics to evaluate the performance and cost of their supply chain operations.

C1.5.1.1. Metrics should provide quantifiable, measurable outputs or outcomes that address all classes of supply and describe all supply chain processes or functions from acquisition through final disposition of end items and materiel. The DoD Components should adopt metrics that:

C1.5.1.1.1. Support program performance agreements and the policy requirements in paragraph C1.1.2., above.

C1.5.1.1.2. Monitor the efficient use of DoD resources.

C1.5.1.1.3. Provide a means to assess costs versus benefits of supply chain operations.

C1.5.1.1.4. Support establishing comparison benchmarks.

C1.5.1.2. The DoD Components shall develop and maintain metrics that address these levels of supply chain operations:

C1.5.1.2.1. Enterprise level. Enterprise metrics are cross-functional measures that describe the overall effectiveness of the supply chain.

C1.5.1.2.2. Functional level. Functional metrics support at least one enterprise metric and measure a major function's internal performance.

C1.5.1.2.3. Program or process level. Program or process metrics support functional metrics and are diagnostic and internal in nature. For weapon systems with established performance agreements, program managers and the Military Services, with system users, can review sustainment strategies by utilizing program level performance metrics to compare actual performance against expected performance.

C1.5.1.3. The DoD Components should balance their metrics across customer service, cost and readiness, and sustainability performance objectives. This approach allows the DoD Components to meet both their strategic needs and the needs of customers, and to address performance and process improvement initiatives.

C1.5.2. Procedures

C1.5.2.1. The DoD Components should develop data collection capabilities that support supply chain metrics.

C1.5.2.2. Whenever possible, the DoD Components should develop and use a flexible, real-time, on-line capability to interrogate metrics by supply source, customer, weapon system, or other supply chain support characteristics. This capability should enable the DoD Components to:

C1.5.2.2.1. Monitor daily operations and trends in weapon system readiness support.

C1.5.2.2.2. Assess and evaluate the results of completed logistics improvements involving materiel reliability, maintainability, and/or supportability.

C1.5.2.2.3. Assess and evaluate the progress on on-going logistics improvement initiatives, such as system modernization.

C2. CHAPTER 2

PLAN

C2.1. DEMAND AND SUPPLY PLANNING

C2.1.1. Requirements

C2.1.1.1. The DoD Components shall plan for and resource all elements of the supply chain to meet customer demand by developing and establishing support strategies that effectively and efficiently provide supply chain resources to meet supply chain requirements for future time periods. Materiel managers should collaborate with their customers or their representatives and maintenance and distribution/transportation managers to determine optimal support strategies that meet documented performance requirements. For commercially supported items of supply, those requirements should be documented in PBL contracts with commercial suppliers. For organically supported items of supply, those requirements should be in performance-based agreements between organic suppliers and their customers. Required actions for organic suppliers include:

C2.1.1.1.1. Identifying, prioritizing, and aggregating customer demand. Identification includes item classification and coding for requirements and requires collaboration with customers on their future needs. Prioritization entails setting parameters/goals for computing inventory levels so that those levels meet documented performance requirements. Aggregation involves accumulating and forecasting customer demand for products or services at the appropriate category, organizational level, and time interval.

C2.1.1.1.2. Balancing inventory with customer demand. For items stocked by the DoD Components, balancing encompasses the actions needed for provisioning new materiel, for determining peacetime and wartime replenishment stockage levels, and for retaining material assets.

C2.1.1.1.3. Managing a planning infrastructure. Beside demand and supply planning, the other supply chain processes of source, make/maintain, deliver, and return (discussed in Chapters 2 through 6, below) all require planning. The DoD Components should provide for and manage an integrated planning infrastructure.

C2.1.1.1.4. Establishing and communicating supply chain plans. Supply chain planning involves establishing and communicating support strategies over an

appropriate time-defined (long-term, annual, monthly, weekly) planning horizon or interval to ensure effective and efficient use of all available supply-chain resources to meet supply-chain requirements.

C2.1.1.2. In performing demand and supply planning, the DoD Components should consider performance attributes of consistency, responsiveness, flexibility, cost, and asset allocation.

C2.1.1.2.1. To provide for reliable support, supply chains should pursue goals that deal with time-definite delivery and quality of order fulfillment.

C2.1.1.2.2. To ensure responsiveness, supply chains should have support goals that are affordable and meet customers' expectations. For weapon system items, those support goals should be readiness-based.

C2.1.1.2.3. Supply chains should be designed to have flexibility equal to the volatility of customer demand and the fluctuations of supplier cycle times.

C2.1.2. Procedures

C2.1.2.1. Requirements and procedures for specific areas of demand and supply planning are provided in the remainder of this Chapter. Requirements and procedures relevant to developing and establishing support strategies are in sections C2.4., "Item Support Goals," and C3.2., "Materiel Support Alternatives."

C2.1.2.2. To optimize their demand and supply planning, the DoD Components should strive towards totally integrated supply chains.

C2.1.2.3. To maximize supply chain productivity, supply chain members should have timely access to all applicable planning information including operating programs, customer requirements, supply chain resources, and total asset information.

C2.1.2.3.1. The IMM shall have visibility of retail supply activity assets and requirements to better utilize those assets to satisfy requirements across the supply chain.

C2.1.2.3.1.1. Retail-level activities shall make available to the IMM the asset and requirements information needed to make decisions on procurement, repair, and lateral redistribution. (See section C5.5., "Lateral Redistribution of Assets," below.)

C2.1.2.3.1.2. A multi-echelon requirements computation process may use knowledge of wholesale and retail assets to compute requirements levels. To support such a process, visibility of retail asset quantities (excluding assets in the hands of the ultimate user) should be made available to the requirements computation system of the managing DoD Component.

C2.1.2.3.2. The IMM shall have visibility of assets transferred to the Defense Reutilization and Marketing Service (DRMS) and shall recall serviceable centrally managed items for reutilization instead of initiating a new procurement or depot repair action.

C2.1.2.3.3. The Military Service headquarters, the major commands, and the weapon system managers shall have sufficient visibility of retail-level assets and requirements within their respective Military Services to assess the capability to support operational and contingency plans and to support weapon system readiness.

C2.1.2.4. The DoD Components should ensure that all supply chain functions and organizations understand their impact on supply and demand balancing.

C2.1.2.5. Requirements and procedures for accessing information used in demand and supply planning are in Chapter 7, "Supporting Technologies."

C2.2. PROVISIONING

C2.2.1. Requirements

C2.2.1.1. Provisioning involves the planning and acquisition of initial spares to support a new major system.

C2.2.1.1.1. Provisioning planning shall begin with program initiation and continue through the system acquisition process. As part of that planning:

C2.2.1.1.1.1. Materiel managers shall work with program managers to ensure that item technical and logistics data relevant to end item supply support are documented and accessible to DoD and commercial materiel managers responsible for provisioning and follow-on support. The objective of provisioning data management is timely access to all data required to identify and acquire initial support items.

C2.2.1.1.1.2. According to 10 U.S.C. 2451 (reference (b)), new items shall be cataloged (see section C8.1., below) and maximum emphasis shall be

placed on reducing the variety of parts and associated documentation required by weapon systems and/or end items through provisioning screening.

C2.2.1.1.2. When the DoD Components are selected as the preferred source of supply for a new major system, they shall integrate provisioning requirements and activities with the system acquisition process through PBL agreements with program managers. (The provisioning requirements and procedures that follow address initial provisioning or support for an end item during its initial period of service. The requirements and procedures for follow-on provisioning or support for an already-in-service end item during a specific period of service, for example, a ship being deployed to sea, are in section C2.6., below.)

C2.2.1.1.3. Items not associated with the acquisition of a new major system may be provisioned. Examples include newly introduced items and items associated with the modification of a system or the introduction of a new subsystem or component. In such cases, materiel managers, together with user representatives, shall set support goals according to section C2.4., below, and evaluate various supply support strategies (e.g., organic and contractor; etc.) according to section C3.2., below. (Special requirements and procedures for introducing new clothing and textile items are in section C8.2., below.)

C2.2.1.2. Where feasible, Readiness-Based Sparing (RBS) - an inventory requirements determination methodology that produces an inventory investment solution that meets end item performance requirements at minimum cost - shall be used to determine organic weapon system support provisioning requirements. When it is not feasible to use RBS models and processes, demand-based requirements determination methodologies may be used. Appendix 2 lists limitations on using demand-based methodologies for provisioning.

C2.2.1.3. During provisioning, demand and supply planning shall consider end item population build-ups. Procurements of support items for DoD stockage:

C2.2.1.3.1. Shall be phased based on weapon system and/or end item program development and delivery schedules.

C2.2.1.3.2. Should not be made until a lead time before the fielding of an organically supported weapon system or end item.

C2.2.1.4. To measure the effectiveness of provisioning performance, tools, and process improvement initiatives, provisioning performance measures (quality standards) shall be established.

C2.2.2. Procedures

C2.2.2.1. Provisioning Data Management. According to the requirements in subparagraph C2.2.1.1.1.1., above, and the item identification and management data procedures in DoD 4100.38, "Department of Defense Provisioning and Other Procurement Screening Manual" (reference (c)), the following apply:

C2.2.2.1.1. Materiel managers shall provide program managers with applicable provisioning data requirements, to include in end item acquisition solicitation documents. (Appendix 2 provides additional procedures that deal with item data requirements.)

C2.2.2.1.1.1. Provisioning data requirements are defined as Provisioning Technical Documentation (PTD) and Engineering Data for Provisioning (EDFP) according to MIL-PRF-49506, "Logistics Management Information" (reference (d)) and MIL-HDBK-502, "Acquisition Logistics" (reference (e)).

C2.2.2.1.1.2. Materiel managers shall verify that the PTD and EDFP are sufficient to support reprocurring required support items, if necessary. Data deficiencies should be identified and corrected before the expiration of end item contractual obligations.

C2.2.2.1.2. During provisioning, materiel managers shall ensure that provisioned support items are coded and reviewed for shelf-life considerations, according to the DoD Shelf-Life Item Management Program (see paragraph C5.7.5., below), the procedures of DoD 4140.27-M (reference (f)), and the codes identified in DoD 4100.38-M (reference (c)). Emphasis should be on identifying and using non-hazardous items and longer shelf-life items, where possible.

C2.2.2.1.3. During provisioning, materiel managers shall ensure the cognizant ESA performs a criticality determination for each new item. Aviation items found to have critical safety characteristics and/or processes shall be coded as such per section C8.5., below.

C2.2.2.2. Provisioning Screening

C2.2.2.2.1. Manufacturer's part numbers and other reference number data shall be screened during the provisioning process, according to DoD 4100.38-M (reference (c)) to prevent unnecessary or duplicate items from entering the supply system.

C2.2.2.2.2. When provisioning screening reveals that a support item or an acceptable substitute item is already an established item (that is, already assigned a National Stock Number (NSN)), the requirement for the item shall be filled from existing stocks or through normal replenishment procurement. This additional requirement must be coordinated with the IMM.

C2.2.2.2.3. The DoD Components shall facilitate electronic access to Federal Catalog System files by contractors who are under current weapon system development or production contracts.

C2.2.2.2.4. The DoD Components may use the Defense Logistics Information Service (DLIS) to provide additional screening support and to support the entry of new state-of-the-art technology into the supply system by developing new cataloging nomenclature and descriptive methods.

C2.2.2.3. Transition Support

C2.2.2.3.1. In the event that a transition from initial contractor support to organic supply support is required, it should be planned as follows:

C2.2.2.3.1.1. The transition schedule should be based on design stability and supply support concept compatibility with maintenance concepts and other logistics support elements.

C2.2.2.3.1.2. Contractor to organic supply support transition and schedules should be consistent with the system/equipment logistics support plan. Phased support approaches are encouraged, allowing for the cost-effective transition to organic supply support.

C2.2.2.3.2. In the event that a contractor is selected to provide supply support for a weapon system, including supply support for established items, the transition of some or all of the support for those items shall consider existing organic assets.

C2.2.2.4. Provisioning Requirements Determination

C2.2.2.4.1. For cost-effective weapon system support and to satisfy readiness-based performance agreements, the DoD Components, when selected as the preferred source of support, should use a RBS requirements determination process to compute provisioning requirements for spare and repair parts.

C2.2.2.4.1.1. RBS processes require establishing an optimum range and quantity of spare and repair parts at all stockage and user locations to meet approved, quantifiable weapon system readiness, operational availability, or fully mission capable rates.

C2.2.2.4.1.2. Provisioning RBS requirements determination models shall be similar to the RBS requirements determination models used for replenishment so that supply planning is consistent throughout the life cycle of the weapon system.

C2.2.2.4.1.3. Procedural control over RBS models and processes shall be retained at the DoD Component logistics headquarters.

C2.2.2.4.2. Appendix 2 addresses using a demand-based process when a RBS process does not apply or is not feasible.

C2.2.2.5. Procuring Provisioned Support Items

C2.2.2.5.1. When selected as the preferred source of supply, procuring DoD Components should have the capability to create interactive support management plans that enable incremental scheduling and implementation of support, based on configuration indenture and delivery of weapon systems and equipment.

C2.2.2.5.1.1. Provisioning retail procurement levels should be developed based on end item density factors and site activation schedules.

C2.2.2.5.1.2. Provisioning wholesale procurement levels should be developed based on a time-weighted average month's program, which is the average number of end items supported each month.

C2.2.2.5.2. The procuring DoD Component may authorize contractors, in advance of formal procurement, to release limited quantities of long lead time support items (those items, which due to their complexity of design, complicated manufacturing processes, or limited production, require early ordering to ensure timely delivery).

C2.2.2.5.3. Incremental release of procurement orders for provisioned support items should be executed so that the obligation of funds is made on the basis of the procurement lead time required to ensure that the support items arrive for the scheduled initial outfitting support dates. When it is found to be uneconomical to release orders incrementally, this method may be waived by the procuring DoD Component.

C2.2.2.5.4. DoD materiel managers, with program managers and product support integrators selected by program managers, shall arrange for acquiring initial spares, as well as replenishing spares, as early in the production process as possible.

C2.2.2.6. Provisioning Performance Measures

C2.2.2.6.1. When selected as the preferred source of supply, the DoD Components shall develop and maintain provisioning performance measures.

C2.2.2.6.2. Measurement criteria should include the following customer-oriented and efficiency-oriented measurement goals:

C2.2.2.6.2.1. Assessment of provisioning contribution to achievement of readiness or other PBL objectives laid out in program performance agreements.

C2.2.2.6.2.2. Accuracy of provisioning buys.

C2.2.2.6.2.3. Ability to meet provisioning milestones.

C2.2.2.6.2.4. Accuracy of provisioning documentation.

C2.2.2.6.2.5. Inventory efficiency, as measured by minimized inactive inventories.

C2.3. ITEM CLASSIFICATION AND CODING FOR STOCKAGE REQUIREMENTS

C2.3.1. Requirements

C2.3.1.1. The DoD Components shall review their initial classification of items as "consumable," "field-level reparable," or "depot-level reparable" and their Source, Maintenance, and Recoverability (SMR) code assignments to ensure that the classification of an item continues to provide the most economical support throughout the life of the item.

C2.3.1.2. The purpose of Military Mission Essentiality (MME) coding is to provide for a complete linkage between secondary items with NSNs and the higher assemblies and weapon systems that they are part of. Accordingly:

C2.3.1.2.1. In generating weapon system application files, the Military Services should ensure that the essentiality of component items are coded and those codes are made accessible to materiel managers.

C2.3.1.2.2. The DoD Components shall allocate management resources and vary the intensity of management for each item based on MME coding.

C2.3.1.3. An item new to the DoD supply system shall be coded initially at wholesale and retail levels of supply as stocked (either with readiness-based, demand-based, limited-demand, or non-demand-based requirements) or non-stocked. That initial coding may change over time if a different support alternative is selected for an item due to economics or readiness considerations. (See section C2.6., below.)

C2.3.2. Procedures

C2.3.2.1. The DoD Components shall assign the uniform SMR codes prescribed by AR 700-82/OPNAVINST 4410.2A/MCO 4400.120.¹ The Secretary of the Army shall be responsible for coordinating, publishing, and maintaining joint guidance.

C2.3.2.1.1. For end items used by multiple Military Services, coding decisions shall be coordinated among the users to promote maximum inter-Service maintenance and supply support.

C2.3.2.1.2. The review of SMR code assignments should occur for reparable items when their repair costs are greater than 65 percent of their replacement prices and for consumable items when they have a high annual demand value and experience significant field repair.

C2.3.2.2. The Military Services should ensure that MME codes are assigned and maintained according to Appendix 4. They may tailor their MME coding to meet their operational needs as long as such coding is not inconsistent with Appendix 4. For inter-DoD Component data exchange of item essentiality data, the item essentiality coding in Appendix 4 shall be used.

¹ Joint issuance AR 700-82/OPNAVINST 4410.2A/MCO 4400.12, "Joint Regulation Governing the Use and Application of Uniform Source Maintenance and Recoverability Codes," 28 February 2003, can be found at website http://www.army.mil/usapa/epubs/pdf/r700_82.pdf.

C2.3.2.3. The using DoD Component shall include the current MME code on supply support requests to the other DoD Components.

C2.3.2.4. If weapon system application files, which are described in section C7.4., below, indicate that a secondary item has multiple applications, it normally shall be assigned the highest applicable essentiality code. A secondary item may have a different essentiality code for each of its end item applications.

C2.3.2.5. The DoD Components shall review and validate the assignment of essentiality codes periodically to ensure that they reflect the current status of the items.

C2.3.2.6. The using DoD Component shall provide application data to DoD IMMs in a timely fashion or update codes previously provided when criterion change or when items or weapon systems become obsolete. Rejected transactions transmitting application data shall be researched, corrected, and resubmitted on a timely basis.

C2.3.2.7. The DoD Components shall annually reconcile the Service weapon system application file and the DLA Weapon System Support Program database.

C2.3.2.8. To identify how items are being managed at retail supply activities, the DoD Components shall use the reasons for stockage categories delineated in Appendix 3.

C2.4. ITEM SUPPORT GOALS

C2.4.1. Requirements

C2.4.1.1. Item support goals shall be established for all DoD secondary items to ensure that the supply system optimally uses available resources to meet weapon system and equipment performance objectives and personnel readiness objectives at the least cost. Establishing these goals is required regardless of the source or method of support, e.g., organic, inter-governmental, private contractor, or partnership.

C2.4.1.2. Item support goals should be based on the performance agreements negotiated with customers or, where no agreement exists, on the enterprise metrics that the DoD Components have adopted for supply support.

C2.4.1.3. The objective in establishing item support goals is to provide logistics managers with quantitative targets that they may use to improve supply planning, asset allocation, and the contribution of limited inventories and limited

procurement, repair, and distribution resources to better weapon system and personnel readiness capabilities.

C2.4.1.3.1. Item support goals shall be used to assess the performance of the DoD supply chain and as a basis for evaluating the effectiveness and benefits of process improvements.

C2.4.1.3.2. The DoD Components shall implement support goal calculation rules that ensure consistency of measurement and oversight across the Department of Defense.

C2.4.1.3.3. Each DoD Component is responsible for setting target support goals that reflect both peacetime and wartime needs. In setting support goals, the process should be synchronized with and linked to the programming and budgeting process to ensure consistency with management decisions as to priorities and the resources committed against those priorities.

C2.4.1.3.4. To permit cost tradeoffs, the DoD Components should quantify support goals that apply to item populations (i.e., organizational, commodity, equipment, or weapon system populations). The DoD Components may have individual item goals when they are required to meet specific customer requirements or when they are generated by a process that considers cost tradeoffs in meeting a population readiness or other established support goal.

C2.4.1.3.5. Timely receipt of items ordered by customers of the supply system typifies responsive, consistent, and reliable support and contributes to the overall confidence of customers in the DoD supply system. All organizations in the supply chain should recognize and emphasize the importance of time in establishing item support goals for their respective logistics functions.

C2.4.2. Procedures

C2.4.2.1. In setting support goals that encompass the total responsiveness of the supply system, the DoD Components shall consider both the performance they can expect from their inventories and the time to deliver materiel in response to a customer order.

C2.4.2.2. For secondary items managed by DoD materiel management activities (e.g., wholesale inventory control points (ICPs) and retail supply activities), those activities shall establish and use applicable inventory performance goals as an integral part of the process to compute stockage requirements and asset allocation based on the following:

C2.4.2.2.1. For items that are essential to weapon system performance, the inventory performance goals shall relate to the readiness goal of the weapon system throughout its life cycle, e.g., operational availability, mission capable rates. The DoD Components should set weapon system readiness goals with weapon system managers and/or operational commands.

C2.4.2.2.2. For items that are non-essential to weapon systems or are non-weapon system items, the inventory performance goals shall relate to the time to fill a customer's order, whether that order is a requisition placed on an ICP or a demand request placed on a retail supply activity. Those time goals may be established by organizational, commodity, equipment, or weapon system groupings for application to individual item requirements computations.

C2.4.2.3. For secondary items being supported through contractual arrangements providing direct materiel support from commercial sources to DoD operational or using activities, contracted support goals, which the commercial sources can use to size their supporting inventories, should be goals that program managers or materiel managers have negotiated with those customers.

C2.4.2.4. To provide for timely delivery as well as process improvement in responding to requisitions placed on the ICPs, the DoD Components shall use negotiated time-definite delivery standards or, where no negotiated standards exist, the general delivery standards, as described in section C8.8., below.

C2.4.2.5. The DoD Components should provide for an automated capability to store and retrieve support goals and related item data that shall permit analyzing historical performance against goals at a population, group or item level. The data should include items supported from both organic and commercial sources. This capability should be maintained throughout the life cycle of the supported end item or for a period of years that the DoD Component deems necessary.

C2.5. FORECASTING CUSTOMER DEMAND

C2.5.1. Requirements

C2.5.1.1. Customer demand shall be part of all DoD Component inventory management decisions. The DoD Components shall not stock an item that does not have any possibility of future demand.

C2.5.1.2. The DoD Components shall use quantitative models to forecast future demand except when:

C2.5.1.2.1. The possibility of demand is based solely on the potential of a catastrophic event.

C2.5.1.2.2. The possibility of demand exists, but historical demands or future engineering estimates are too small to support the use of any quantitative model.

C2.5.1.3. In deciding what forecasting models to use, the DoD Components should consider data patterns, the resources required to make a forecast, and the forecast's horizon, application, and accuracy.

C2.5.1.3.1. Since no universal model exists for forecasting demand for all items, the DoD Components may choose to use multiple models for the same application or different models for different applications.

C2.5.1.3.2. When using models that rely on historical data, the DoD Components shall identify and exclude or adjust atypical data that might unduly influence the forecast.

C2.5.1.3.3. As delineated in subparagraph AP2.2.1.4., below, engineering estimates may be used to forecast future demand at the beginning of the demand development period. After completing the demand development period, actual demand data, augmented with program data, normally shall be used to forecast future demand. However, using engineering estimates is permitted when:

C2.5.1.3.3.1. An item has insufficient representative operating time to adjust the forecast by using a valid statistical technique.

C2.5.1.3.3.2. An engineering problem or forthcoming design change has resulted in past demands not being indicative of future demands.

C2.5.1.4. To improve the accuracy of demand forecasts, materiel managers should collaborate with their customers on future demand. The information that they exchange may be included in demand forecasting models or may be used to supplement the forecasts from those models. In instances where the information exchanged between members of the DoD supply chain provides an exact forecast of future demand, that information may be used in place of demand forecasts generated by models.

C2.5.1.5. The DoD Components may extend collaborative forecasting to commercial suppliers to improve the support that those suppliers provide.

C2.5.1.6. Variances in demand forecasts outside established parameters should be flagged for management analysis and action.

C2.5.2. Procedures

C2.5.2.1. To forecast the demand expected to be placed on the supply system within a specified time period, the DoD Components may use models that consider only historical demand, models that combine future program data with historical demand or failure data and past and future program data to generate forecasts. To allow for continuing application of a model and the possibility of transition from one model to another, the DoD Components shall retain sufficient historical demand or failure data and, if applicable, program data.

C2.5.2.1.1. Historical failure data consists of maintenance replacement data or supply requisition data. Demand data, including reparable generations and maintenance replacements, shall be recorded in a timely manner on the supply records of the intermediate-level supply point.

C2.5.2.1.2. Past and future program data exchanged as part of collaborative forecasting should consist of actual quantitative measures of operation, such as the actual and planned number of hours flown or operated, the weapon system or end item density, or the number of overhauls or scheduled depot maintenance actions accomplished or planned. Estimates may be used if actual data are not available. (Section C7.4., below, addresses storing and accessing weapon system data.)

C2.5.2.1.3. Where feasible, actual customer demands and usage should be captured at point of sale and, along with collaborative forecasting, used to update future demand forecasts for each echelon of supply.

C2.5.2.2. Except for atypical occurrences and selected Foreign Military Sales (FMS), all demand identified by customers as recurring shall be used to build forecasts used to compute item requirements levels. The IMM shall use data filtering techniques to identify and exclude atypical data. FMS that are not under Cooperative Logistics Supply Support Arrangements (CLSSA) shall be excluded. Demand that customers identify as non-recurring shall be included to the extent that the IMM is able to demonstrate that a particular quantity of non-recurring demands will improve its demand forecasts.

C2.5.2.3. Each DoD Component shall provide for the capability within its management information systems to rapidly revise demand forecasts affected by introducing or phasing-out of weapon systems or equipment, as well as erroneous, incomplete, or inapplicable data.

C2.5.2.4. Special Program Requirements (SPRs). SPRs are a tool to accomplish collaborative forecasting between IMM and their customers by allowing customers to communicate special future requirements directly to IMM.

C2.5.2.4.1. The using DoD Components may submit SPRs to the IMM to forecast special program or project requirements that are non-repetitive in nature and may not be forecasted based on demand data and that are exclusive of subsistence, war reserve, provisioning, and other requirements based on recurring demand. Standard processing and accounting methods prescribed by DoD 4000.25-2-M (reference (g)) shall be employed in the SPR process.

C2.5.2.4.2. The using DoD Components shall establish internal controls and maintain supporting documentation to ensure the appropriateness and accuracy of SPR submissions, correlate requisitions with related SPRs, and ensure timely and accurate reporting of significant changes.

C2.5.2.4.3. The DoD Components receiving SPRs shall establish internal controls to ensure that investment in inventory to support SPRs does not lead to excessive growth in SPR-related inventory.

C2.6. MATERIEL STOCKAGE COMPUTATIONS

C2.6.1. Computational Methodologies

C2.6.1.1. Requirements

C2.6.1.1.1. The DoD Components shall categorize stockage requirements and associated levels of inventory as either wholesale or retail. Wholesale assets, regardless of where positioned, shall be managed under wholesale inventory policies.

C2.6.1.1.2. To compute wholesale and retail stockage requirements for secondary items, the DoD Components shall use readiness-based, demand-based, limited-demand, and non-demand-based methodologies. (See paragraph C9.3.4., below, for guidance on the requirements computations of ammunition items). The specific methodology used to compute stockage requirements for a secondary item shall be

based on the type of item (reparable or consumable); the supply performance goal (weapon system readiness or time to fill a demand); and the expected customer demand for the item.

C2.6.1.1.3. The DoD Components shall use the methodologies and sparing models prescribed in paragraphs C2.6.2. through C2.6.6., below, to compute sustainment requirements for stocking and replenishing secondary items. Those methodologies and models shall be compatible with those developed to achieve optimum stockage during provisioning. They should share similar target objective functions, data elements, and computational techniques.

C2.6.1.1.4. When possible to achieve weapon system performance objectives, RBS models should be capable of optimizing support across both the wholesale and retail echelons of supply and should account for the indenture level of items being spared, the essentiality of items to the operational design of the weapon system, and the levels of maintenance for the items and their higher assemblies. When RBS optimization is not feasible and demand-based models must be used for weapon system items, the time goals for those models should be linked to the readiness goals of the particular weapon systems and established through a collaborative process among members of the supply chain and weapon system managers.

C2.6.1.1.5. Stockage quantities shall be projected to satisfy National and international (CLSSA) item requirements.

C2.6.1.2. Procedures

C2.6.1.2.1. For secondary items that have support goals related to weapon system readiness, the DoD Components shall compute requirements with RBS models that relate range and depth of stock to their effect on the operational availability of the weapon system. Those models should be capable of optimizing support to achieve weapon system readiness goals for the least cost or maximizing weapon system readiness for a specified level of funding.

C2.6.1.2.2. For secondary items that have time goals, the DoD Components shall compute requirements using sparing models that relate range and depth of stock to a target time that includes both the time to fill immediate issues and the time to fill backorders. These models should be capable of optimizing stockage to achieve the target time at the least cost or minimizing the expected fill time within a specified budget.

C2.6.1.2.3. For depot-level reparable items, these additional procedures apply:

C2.6.1.2.3.1. DoD ICPs shall compute the total requirements for each reparable item assigned so that an item may be:

C2.6.1.2.3.1.1. Supplied to authorized using activities at the organizational level (e.g., post, base, field, or ship) if failure of a reparable component prevents an end item or weapon system from achieving its mission.

C2.6.1.2.3.1.2. Provided to replace a reparable item that has been determined to be beyond economical repair during the depot-repair process (see Chapter 2 of Volume 11A of DoD 7000.14-R, reference (h)), or that may not be repaired within the same length of time as its next higher assembly.

C2.6.1.2.3.2. Item requirements and assets shall be projected over a sufficient time period so that an order is placed for the item sufficiently in advance of the actual need to provide for the requisite lead time. For reparable item requirements, both serviceable and unserviceable asset quantities shall be projected by month or by quarter so that repair requirements as well as procurement requirements may be projected in the same computation. Serviceable returns shall be considered in requirements computations from both the asset and requirements perspectives. (See Chapter 6.)

C2.6.1.2.3.3. Assets that are serviceable and those that need repair at all supply levels (organic or commercial) shall be made visible and available to the IMM (supply system) to satisfy requirements at both the wholesale and retail levels. Assets available at the retail level (consumer and intermediate) shall be visible and used to offset requirements at that level; additional assets available at that level shall be visible to the IMM and used to offset wholesale-level requirements.

C2.6.1.2.3.4. To facilitate total system asset management of depot level reparable items, intermediate-level supply management system procedures (except afloat) shall include the capability to accomplish transaction item reporting on at least a daily summary basis to the applicable IMM on supply transactions affecting the demand base or stock status of materiel. For items with daily summary transaction reporting, the IMM may, on a timely basis, use actual consumer demands to make requirements computations, procurement decisions, and stock positioning decisions.

C2.6.1.2.3.4.1. This requirement applies to DoD Component-owned inventory at contractor-operated intermediate-level activities, as well as inventory within the DoD Component supply management systems.

C2.6.1.2.3.4.2. Item accounting (as opposed to dollar value inventory accounting) shall be maintained:

C2.6.1.2.3.4.2.1. At the intermediate level for all items on which the IMM has determined that daily summary transaction item reporting is required. The DoD Components may assign that requirement to selected consumer-level inventories.

C2.6.1.2.3.4.2.2. For all reparable assets held at the intermediate level. Items may be placed in rotatable pools or simply positioned near expected consumers, if line-item accounting is accomplished at the intermediate level.

C2.6.2. Readiness-Based Sparing Computations

C2.6.2.1. Requirements

C2.6.2.1.1. Wholesale Stockage Requirements. Weapon-essential items that are managed on the basis of multi-echelon RBS models are authorized stockage objective quantities that the models determine. Where multi-echelon RBS models are not yet available, wholesale stockage of weapon-essential items shall be based either on demand-based requirements that have readiness-oriented time goals (e.g., goals that support weapon system availability targets), or on limited demand or non-demand-based requirements.

C2.6.2.1.2. Retail Stockage Requirements. Weapon-essential items that are managed on the basis of single-echelon or multi-echelon RBS models are authorized stockage objective quantities that the models determine. Where RBS models are not yet available, retail stockage of weapon-essential items shall be based on demand-based requirements that have their support goals driven by weapon system readiness or on non-demand-based requirements.

C2.6.2.2. Procedures

C2.6.2.2.1. To support RBS computations, an application file shall be established to record all items in a weapon system, including indenture structure. All reparable components shall be included in that application structure, as well as essential and other consumable items required to operate the weapon system. Items peculiar to

one weapon system and items common to more than one weapon system shall be included in the application file.

C2.6.2.2.2. RBS optimization logic shall be used to compute the total requirements for the items essential to a weapon system.

C2.6.2.2.2.1. RBS levels shall be set by item or by group of items with similar characteristics. The computation of RBS levels for an item common to more than one weapon system should consider the total demand for that item and the contribution of the levels to the readiness goals of all respective weapon systems.

C2.6.2.2.2.2. The RBS model shall be capable of computing optimal item stock levels in a dynamic environment. Where possible, item requirements shall be computed to account for dynamic conditions when variables like rapidly changing sortie rates, operating programs, maintenance capabilities, or transportation resources may impact the operating unit's materiel requirements and resultant readiness.

C2.6.2.2.2.3. An item's minimum stock level may be equal to its pipeline quantity. When funds are insufficient to get the desired support objectives, the model must be capable of overriding the minimum constraint to attain the optimum mix of stock to maximize weapon system availability for the available funds.

C2.6.2.2.2.4. The RBS model must produce a list of item requirements to be satisfied initially by the application of serviceable assets, unserviceable repairable assets, and applicable due-in assets. The repair requirement is that portion of the total requirement that is satisfied by repair of unserviceable repairable assets. The replenishment requirement is the deficit remaining after the supply of available assets is exhausted.

C2.6.2.2.3. Where data availability and model capabilities permit, RBS models should be able to compute combined requirements for a range of weapon systems to minimize the total inventories supporting those weapon systems at individual locations. The RBS models shall have the capability to compute those requirements to availability goals that differ by weapon system so that the goals of weapons systems with higher priority missions may be targeted at levels higher than those with lower priority missions.

C2.6.2.2.4. Where data availability and model capabilities permit, RBS models shall directly compute both the range and depth for all echelons of supply. That multi-echelon capability should:

C2.6.2.2.4.1. Account for the hierarchical structure of supply and/or maintenance activities from the customer or consumer level, through the intermediate level, to the depot or wholesale level.

C2.6.2.2.4.2. Trade off the wholesale level of supply with the retail level by modeling the impact of the requisition response time on the retail response time to customer demand.

C2.6.2.2.4.3. Cover demand-related pipeline and safety-level requirements and, to avoid unnecessary procurement or repair actions, apply the same constraints as demand-based wholesale safety levels (see subparagraphs C2.6.3.2.6.1. and C2.6.3.2.6.2., below) to the safety-level portion of an item's wholesale stock level.

C2.6.2.2.5. Where data availability and model capabilities permit, RBS models shall have a multi-indenture capability that:

C2.6.2.2.5.1. To the extent practical, links each item to its next higher assembly in the weapon system application by modeling the impact of a lower-level assembly (an item whose next higher assembly is another item or subassembly) on the availability of its next higher level assembly or assemblies.

C2.6.2.2.5.2. Uses an item indenture structure to trade off between items at the first level of indenture (i.e., items whose next higher assembly is the weapon system) and items at lower levels of indenture needed to repair those items. In that way, the impact of each item on each level of indenture, and ultimately on the weapon system itself, is portrayed; and the requirement for the highest level assembly shall not be based on assuming, 100 percent of its lower level assemblies are available. Models for non-demand-based items may be excluded from the indenture structure requirement.

C2.6.2.2.5.3. Interfaces with the field-level repairable or consumable item computation so that a link may be established to consider the impact of the availability of those items on their next higher assemblies and ultimately on the availability of the weapon system, and their procurement or repair requirements may be computed using that link.

C2.6.2.2.6. Where data availability and model capabilities do not provide for directly computing range and depth for all echelons, a single echelon RBS model that uses expected wholesale resupply times shall determine retail stock levels required to support weapon system availability goals.

C2.6.2.2.6.1. The process that sets wholesale support objectives and later expected resupply times should consider the impact those times have on retail stock levels.

C2.6.2.2.6.2. When funds are insufficient to attain desired wholesale support objectives, the expected resupply time must be extended. The wholesale echelon must be capable of passing the expected change in the resupply time to the retail level so that weapon system availability may be assessed.

C2.6.2.2.7. For items that one DoD Component use but another manages, these procedures apply:

C2.6.2.2.7.1. The using Military Service shall provide the managing DoD Component with demand forecast data for the item and the requisition response time objective for the item by weapon system. The using Military Service shall also provide the managing DoD Component with the non-weapon system demand forecast and the number of retail assets above the retail requisitioning objective by item.

C2.6.2.2.7.2. Using the data from the using Military Service, the managing DoD Component shall compute the items' buy or repair requirements with the goals of attaining the users' weapon system availability objectives within the maximum requisition response times. The managing DoD Component shall advise the using Military Service of the achievable requisition response time for each item.

C2.6.2.2.7.3. The using Military Service shall determine the impact of the achievable requisition response times on cost and weapon system availability.

C2.6.2.2.8. The DoD Components shall track actual weapon system performance to determine the impact of budget and funding decisions on actual operational availability and to calibrate their models' predicted support statistics with actual data.

C2.6.2.2.9. RBS models should be capable of doing readiness assessments as well as computing requirements. The models shall be capable of measuring the effects of various levels of investment in spare parts on end item readiness. To do this, the models shall be:

C2.6.2.2.9.1. Capable of measuring the effects of proposed budget adjustments.

C2.6.2.2.9.2. Able to assess end-item readiness on the basis of various levels of stockage; e.g., assessing the capability derived from assets currently on-hand, or assets planned to be repaired or procured.

C2.6.2.2.9.3. Able to differentiate between items that are essential to a weapon system and those that are not and to differentiate among degrees of essentiality.

C2.6.2.2.10. Models used for assessment purposes may be different models from those used for requirements determination for purposes of expediency or ease of processing. However, their algorithms must be similar in terms of the logic and computational objectives and must produce comparable results.

C2.6.3. Wholesale Demand-Based Sparing Computations

C2.6.3.1. Requirements. The objective of wholesale demand-based sparing computations is to minimize the quantity of material placed on order and in storage in the DoD supply chain by balancing costs against supply performance goals established with customers. The following inventory requirements levels, or their commercial software equivalents, apply:

C2.6.3.1.1. Requirements Objective. The requirements objective for a demand-based item establishes the target quantity for replenishing the item's level of stock through procurement.

C2.6.3.1.2. Economic Order Quantity (EOQ). The objective of using EOQ methods to set target order quantities is to minimize the total cost of ordering and holding inventories. When EOQ methods are used, every attempt shall be made to purchase materiel under indefinite delivery and indefinite quantity (IDIQ) contracts, so the order quantity and delivery times are reduced.

C2.6.3.1.3. Reorder Point. The objective of a reorder point is to identify when an order should be placed to replenish stock for an item. It should consider the item's acquisition lead time quantity, safety level, repair cycle level if applicable, and any applicable non-demand-based levels. Demand-based items may be procured when the assets on-hand and on-order are equal to or less than the reorder point.

C2.6.3.1.4. Acquisition Lead Time Quantity. The objective of a acquisition lead time quantity is to satisfy demand throughout the acquisition lead time.

C2.6.3.1.4.1. Acquisition lead time is a forecast of the likely future interval between identifying a materiel requirement and receiving the associated procured materiel. Acquisition lead time consists of two consecutive time periods: administrative lead time (ALT) and production lead time (PLT).

C2.6.3.1.4.2. The DoD Components shall aggressively pursue the lowest possible acquisition lead times.

C2.6.3.1.5. Levels for Repairable Items. Repair shall be the preferred source of supply for repairable items. The following requirements computations support the repair process:

C2.6.3.1.5.1. Repair Turn-Around Time Level. A repair turn-around time level shall be computed to determine the minimum number of serviceable assets needed to support demand when unserviceable assets are inducted into the repair process.

C2.6.3.1.5.2. Repair Point. A repair point shall be set to determine when unserviceable assets for an item should be inducted into depot-level maintenance. At a minimum, the repair point should encompass the repair turnaround time level.

C2.6.3.1.5.3. Economic Repair Quantity. Economic repair quantity shall be used in production planning to determine total quantities of unserviceable assets that shall be inducted into depot-level maintenance, unless another quantity is specifically justified on a line-item basis. Economic repair quantities shall be based principally on inventory requirements, not maintenance workload requirements.

C2.6.3.1.6. Safety Level. Due to fluctuations in demand over lead times, repair cycle times, attrition rates, and in other variables, safety level quantities may be stocked as a buffer against backorders. Safety levels shall be decreased as fluctuations in those variables decrease.

C2.6.3.1.7. Repair-Cycle Level (RCL). An RCL shall be computed to replace assets that are found unserviceable during depot-level maintenance.

C2.6.3.2. Procedures. IMMs shall have the automated capability to compute requirements levels as well as a "what-if" capability to evaluate changes in demand, lead times, cycle times, and other factors used in computations and a capability to rapidly re-compute levels as changes occur. The following computations apply:

C2.6.3.2.1. Requirements Objective Computation. The requirements objective for items with demand-based requirements shall be the sum of the EOQ and reorder point.

C2.6.3.2.2. EOQ Computations. Target order quantities shall be computed using either the standard Wilson EOQ, a variation of the Wilson EOQ (e.g, recognizing backorders or quantity discounts), or a cost-conscious method consistent with time-phased buy/repair planning.

C2.6.3.2.2.1. Order costs and holding cost rates shall be validated annually and updated as significant changes occur. Guidance on estimating the cost-to-order and cost-to-hold are included in Appendix 5.

C2.6.3.2.2.2. EOQs shall be limited to a maximum of 24 months and a minimum of the lesser of the ALT demand or 1 month of demand. The EOQ minimum may be reduced if a lesser quantity may be ordered economically. The EOQ maximum may be overridden if the head of the procuring activity certifies in writing that the acquisition is necessary for any of the following reasons:

C2.6.3.2.2.2.1. To achieve an economical order quantity that is not forecasted to result in an on-hand inventory in excess of 3 years of operating stocks and that the need for the item is unlikely to decline during the period for which the acquisition is made.

C2.6.3.2.2.2.2. For purposes of maintaining the industrial base or for other reasons of national security.

C2.6.3.2.2.2.3. To satisfy a minimum purchase quantity imposed by the vendor, as a special case of subparagraph C2.6.3.2.2.2.1., above.

C2.6.3.2.2.3. EOQ quantities for items associated with an end item that is being phased out or with a trend of declining demand shall be adjusted downward accordingly.

C2.6.3.2.2.4. Only the demand to be satisfied through procurement shall be used to compute EOQs for repairable items. That excludes demand to be satisfied through repair.

C2.6.3.2.3. Reorder Point Computation. An item's reorder point shall be the sum of its acquisition lead-time quantity; variable safety level; and repair-cycle quantity, if applicable. Non-demand-based requirements; e.g., war reserve or planned program requirements, if applicable, are additive.

C2.6.3.2.4. Acquisition Lead-Time Quantity. The acquisition lead-time quantity shall equal the expected demand over a acquisition lead time, where acquisition lead time is the sum of ALT and PLT.

C2.6.3.2.4.1. For reparable items, the expected demand that goes into the lead-time quantity computation should be based on attrition and/or condemnation rates and rates for new future demand and shall exclude demand satisfied by the repair pipeline. Activities authorized to condemn reparable items shall be determined, according to AR 700-82/OPNAVINST 4410.2A/MCO 4400.120.² IMMs shall project the quantity of assets that are expected to be condemned over the applicable forecast period.

C2.6.3.2.4.2. The following procedures for computing ALT apply.

ALT:

C2.6.3.2.4.2.1. Begins when an item's wholesale asset level is reduced to the reorder point, or the time at which a purchase request must be initiated to ensure that, at least in theory, the new stock arrives just as the assets on hand reach the safety level.

C2.6.3.2.4.2.2. Ends on the date the contractual instrument is executed.

C2.6.3.2.4.2.3. Includes the time periods required for identifying the requirement to buy; reviewing, approving, and documenting the purchase request; reviewing technical data and documentation; and finally processing and executing the contractual instrument.

C2.6.3.2.4.3. The following procedures for computing PLT apply.

PLT:

² Joint issuance AR 700-82/OPNAVINST 4410.2A/MCO 4400.120, "Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes," November 20, 1999, can be found at website http://www.usapa.army.mil/pdffiles/r700_82.pdf.

C2.6.3.2.4.3.1. Begins on the date that the contractual instrument is executed.

C2.6.3.2.4.3.2. Ends when the material is received. The receiving activity should confirm receiving the delivery to the managing IMM in a timely manner. When all materiel is delivered at the same time, the receipt confirmation date is the end of PLT. When contractual provisions provide for incremental deliveries based on projected demands or other future requirements, the date of confirmation of the first significant delivery (about 10 percent of the routine contract requirement) is the end of PLT. When incremental deliveries occur that are not provided for in contractual provisions, the confirmation date is when all material is received; however, the resulting PLT may be treated as non-representative.

C2.6.3.2.4.3.3. May be based on estimates from contractors; historical information that has been collected for representative procurements; provisioning technical documentation; or estimates based on the best judgment of acquisition personnel.

C2.6.3.2.4.4. The DoD Components shall maintain a historical file of ALTs and PLTs for all secondary item procurements. Historical observations that are non-representative of future performance should be excluded. Exclusion may be based on the IMM's knowledge, experience, and judgment or may result from an automated decision process.

C2.6.3.2.4.5. Methods for calculating realistic minimum and maximum ALT and PLT requirements shall be provided to ensure that inventory management personnel have a means of identifying unusually long or short lead times. The IMM shall decide how to use of the data derived through such methods.

C2.6.3.2.4.6. Innovative methods of pursuing minimum acquisition lead times should be employed. Particular emphasis should be given to the adoption, where applicable, of lead-time reduction methods, which have proven successful in the private sector. Such methods include multi-year contracting, "just-in-time" procedures, indefinite quantity requirements contracts, phased deliveries, and gradual reduction of vendor required delivery dates.

C2.6.3.2.5. RCL. The RCL for reparable items shall equal the expected demand over a repair-cycle time.

C2.6.3.2.5.1. Depot-level repair cycles begin when an organizational and/or intermediate maintenance activity determines that an unserviceable item is

beyond its repair capability and end when the unserviceable item is restored to serviceable condition and is recorded as such on supply records. All time between the beginning and end of the repair cycle shall be included in computing repair-cycle requirements, except avoidable time, such as time expended due to the lack of a repair requirement or inefficiency. Beginning and ending points of each segment of the total repair cycle are described in Appendix 6. Increases to the repair cycle due to time spent awaiting parts shall not be included in computing repair cycle.

C2.6.3.2.5.2. The repair-cycle times used to compute requirements shall be based on approved item standards for the maintenance turn-around segment (e.g., an industrial engineering standard) and the Military Service-specified standards for the other segments. For items repaired under contract the negotiated contract delivery requirements may be used as standards. Actual repair-cycle times shall be used to compare against the standards. Management attention should be applied to either improve the repair-cycle process or correct the standards when actual repair times significantly deviate from the standards.

C2.6.3.2.6. Safety Level (SL) Computation. The wholesale SL computational objective is to find the level of buffer stock that shall minimize the total variable cost of achieving a specified time goal or minimize fill time, subject to a budget constraint. Variable costs consist of the cost-to-order, the cost-to-hold, and an implied shortage cost of not achieving a specified time goal.

C2.6.3.2.6.1. To dampen any overstatement of SL requirements due to imprecise safety-level models and thereby avoid unnecessary procurement or repair actions, an item's SL shall be constrained to a maximum of three standard deviations of lead-time demand or the lead-time demand, whichever is less. For weapon system items, the lead-time demand maximum may be waived in cases where creditable evidence exists that its application significantly impairs weapon system support.

C2.6.3.2.6.2. To limit long fill times for customers, the DoD Components may constrain an item's SL computation limiting the expected fill time in the computation to less than or equal to a given maximum time.

C2.6.4. Retail Demand-Based Sparing Computations

C2.6.4.1. Requirements. The objective of retail demand-based sparing computations is to minimize the quantity of material placed on order and in storage in the DoD supply chain by balancing costs against supply performance goals established with customers. The following requirements levels apply:

C2.6.4.1.1. Requisitioning Objective. The requisitioning objective for a demand-based item shall establish the target quantity for replenishing the item's level of stock by requisitioning or procuring it locally.

C2.6.4.1.2. Operating Level (OL). The OL is a retail EOQ and, as such, is a function of the cost-to-order or cost-to-requisition and the cost-to-hold an item of retail inventory.

C2.6.4.1.3. Retail Reorder Point. The reorder point identifies when an order should be placed to replenish the stock for an item. Demand-based items may be requisitioned or locally procured when the assets on-hand and on-order are equal to or less than the reorder point.

C2.6.4.1.4. Order and Shipping Time Level (OSTL). The OSTL is a function of the anticipated number of maintenance replacements that require supply from external sources and the item's order and shipping time.

C2.6.4.1.5. Local RCL for Repairable Items. The RCL is a function of the anticipated number of maintenance replacements that will be repaired locally and the item's local repair-cycle time.

C2.6.4.1.6. Retail SL. To determine the degree of risk of being out of stock, the SL considers the probabilities that:

C2.6.4.1.6.1. The repair-cycle time will be exceeded;

C2.6.4.1.6.2. The order and shipping time will be exceeded;

C2.6.4.1.6.3. The maintenance replacement rate will be higher than forecasted; and

C2.6.4.1.6.4. A number of maintenance replacements, anticipated for repair at the activity, will require resupply from external sources.

C2.6.4.2. Procedures. When possible, retail item manager shall have or shall have access to an automated capability to compute requirements levels as well as a "what-if" capability to evaluate changes in demand, order and shipping times, cycle times, and other factors used in computations and a capability to rapidly re-compute levels as changes occur. The following computations apply:

C2.6.4.2.1. Requisitioning Objective Computation. The requisitioning objective for a demand-based item shall be the sum of its OL and retail reorder point. A replenishment action establishing a requisition or local procurement should be taken when the asset position reaches the reorder point. The replenishment quantity should equal the requisitioning objective, minus the asset position.

C2.6.4.2.2. OL Computations. The standard Wilson EOQ formula, or variations of it, shall be used to compute the OL when future demand is assumed constant. When future demand varies according to a planned schedule of time-phased requirements, such as demand supporting a depot maintenance program, a dynamic variation of the EOQ model may be used to compute target order quantities. In addition:

C2.6.4.2.2.1. In computing an OL for a reparable item, the demand rate for resupply from external sources, rather than the total demand (maintenance replacements), shall be used.

C2.6.4.2.2.2. An OL shall be limited to a maximum of 12 months. An OL for items associated with an end item that is being phased out or with a trend of declining demand shall be adjusted downward accordingly.

C2.6.4.2.3. Consumable-Item Reorder Point Computation. The reorder point for a demand-based consumable item should be the sum of the item's order and shipping time level, safety level, and any applicable non-demand-based levels.

C2.6.4.2.4. Reparable-Item Reorder Point Computation. Reorder points for reparable items shall be determined as a function of maintenance replacements and shall be tailored to individual item characteristics related to conditions existing at the individual retail-level supply points, taking into consideration factors such as:

C2.6.4.2.4.1. Forecasted rate of maintenance replacement.

C2.6.4.2.4.2. The percent of total maintenance replacements locally repaired.

C2.6.4.2.4.3. The applicable standard for field repair-cycle time.

C2.6.4.2.4.4. The percent of total maintenance replacements not locally repaired.

C2.6.4.2.4.5. The order and shipping time.

C2.6.4.2.4.6. Cost factors such as the cost-to-order materiel and the cost-to-hold inventory.

C2.6.4.2.5. Retail SL Computation. The retail SL computational protects against being out of stock by finding the level of stock that minimizes the total variable cost of achieving a specified performance goal or maximizing performance, subject to a budget constraint. Variable costs consist of the cost-to-order, the cost-to-hold, and an implied shortage cost of not achieving a specified performance goal.

C2.6.5. Limited Demand and Non-Demand-Based Requirements

C2.6.5.1. Requirements

C2.6.5.1.1. Limited-Demand Stockage. Essential items with low demand that do not justify being stocked based on economics and are not viable candidates for a direct vendor delivery (DVD) contract may be stocked as limited-demand items. However, their stockage and replenishment quantities must be constrained. At the retail level, these guidelines apply:

C2.6.5.1.1.1. Stockage of limited-demand items shall be authorized primarily during the initial period of operation of a unit, an activity, or a piece of equipment while demand data for the inventory are being accumulated.

C2.6.5.1.1.2. For some items and in some operational environments, a continuing need may exist to stock items that do not, and are not expected to, qualify as demand-based items based on the economic criteria.

C2.6.5.1.2. Insurance Stockage. Essential items with no failure or demand forecast may be stocked as non-demand-based insurance items at the wholesale level.

C2.6.5.1.3. Planned Program Stocks. Non-demand-based stockage is authorized to satisfy non-recurring requirements evolving from one-time programs.

C2.6.5.1.4. Life-of-Type (LOT) Items. Some items are classified as "life-of-type" because production sources are no longer available; therefore, the total issues anticipated during the life of the end item are forecast and procured at the wholesale level. Other diminishing manufacturing sources alternatives addressed in section C3.6., below, should be explored prior to a LOT buy. When LOT buys are necessary, procurement shall occur as close as possible to one lead time away.

C2.6.5.2. Procedures

C2.6.5.2.1. Limited-Demand Stockage Quantities

C2.6.5.2.1.1. At the wholesale level, limited-demand items shall be stocked in quantities not exceeding two minimum replacement units, except when specific documented analysis supports an alternative quantity that is more cost effective or is required to meet an explicit customer requirement.

C2.6.5.2.1.2. As the probability of limited-demand items being demanded is relatively low, stockage at the retail levels should be kept to a minimum, consistent with the operational environment and the relative essentiality of the item.

C2.6.5.2.2. Insurance Stockage. One minimum replacement unit of an item may be stocked for insurance purposes. Insurance items may be replenished when issued.

C2.6.5.2.3. Planned Program Stocks. The authorized stockage is equal to the sum of the approved programmed requirements only. No safety-level or lead-time quantities are authorized. Planned program requirements are supplemental to any demand-based requirements objective for an item.

C2.6.5.2.4. For limited-demand and all established non-demand-based stockage items at the retail level, these procedures apply:

C2.6.5.2.4.1. Except for items being provisioned, the initiator and the DoD Component approval authority shall annually review and validate the continued need for range and depth of stock. Limited-demand and non-demand-supported stockage levels for provisioning items shall be reviewed and validated when concluding the demand development period. If the using DoD Component requires, a more frequent review and validation may be established. The authorization for requirements that are not validated shall be promptly deleted, and assets on hand shall be reported and/or disposed of, according to the retention and transfer policies in section C2.8., below.

C2.6.5.2.4.2. The DoD Components shall establish both a requisitioning objective and a reorder point. Since the probability of demand is normally small, it may not be prudent to replenish a level immediately on making an issue. To defer and/or avoid reinvestment costs, the DoD Components shall develop reorder point computations that, when taking into account the investment cost and risks of being out of stock, may result in a fractional portion of the requisitioning objective

as the reorder point instead of an across-the board policy of the requisitioning objective, less one.

C2.6.6. Non-Stocked Items

C2.6.6.1. Requirement. No stockage level is authorized.

C2.6.6.2. Procedure. The procurement quantity is initiated on receipt of a valid requisition and is normally limited to the requisition quantity. Exceptions are allowed on an individual item basis, but must be fully documented for each item.

C2.7. SECONDARY ITEM WAR RESERVE REQUIREMENTS

C2.7.1. Requirements

C2.7.1.1. Within authorized funding, the DoD Components shall acquire and maintain, in peacetime, war materiel inventories sufficient to sustain operations, as prescribed in Defense Planning Guidance and Joint Strategic Capabilities Plan scenarios, for committed forces. War materiel inventories shall include peacetime operating stocks, training stocks, and war reserve materiel.

C2.7.1.2. According to DoD Directive 3110.6 (reference (i)), war reserve materiel stocks shall be sized, managed, and positioned to maximize flexibility to respond to a spectrum of regional contingencies, while minimizing the DoD investment in inventories.

C2.7.1.3. Industrial preparedness planning, host-nation support agreements, and commercial specification materials and capabilities shall be employed whenever possible to minimize the inventories needed to satisfy war materiel requirements.

C2.7.1.4. Only those war reserve items that cannot be procured and made ready for deployment within required timeframes shall be held in wholesale war reserve stocks.

C2.7.2. Procedures

C2.7.2.1. Policies related to the computation of war reserve materiel requirements are in DoD Directive 3110.6 (reference (i)).

C2.7.2.2. As part of their biennial Program Objective Memorandum (POM) and annual budget estimate submissions, the DoD Components shall provide information

on the methodology they use to implement paragraph C2.7.1., above, and assign war reserve funding priorities.

C2.7.2.3. The DoD Components should have an automated capability to:

C2.7.2.3.1. Identify, compute, and source war materiel requirements.

C2.7.2.3.2. Build tailored supply support packages for rapid delivery to deploying or deployed forces.

C2.8. MATERIEL RETENTION

C2.8.1. Wholesale Retention

C2.8.1.1. Requirements. The DoD Components shall ensure that all wholesale inventory, regardless of location, is properly categorized with regard to retention and that mechanisms are in place to take proper retention, redistribution, and disposal actions against those inventories.

C2.8.1.1.1. Except for ammunition, principal and secondary items shall be stratified applicably as Approved Acquisition Objective (AAO) stock, Economic Retention Stock (ERS), Contingency Retention Stock (CRS), and potential reutilization stock. Stratification requirements and procedures for ammunition items are in section C9.3., below.

C2.8.1.1.1.1. The AAO is the quantity of an item authorized for peacetime and wartime requirements to equip and sustain U.S. and Allied Forces, according to current DoD policies and plans. That quantity shall be sufficient to support other U.S. Government Agencies, as applicable.

C2.8.1.1.1.2. ERS is stock above the AAO that is more economical to retain than to dispose of. To warrant economic retention, an item should have a reasonably predictable demand rate. If the expected demand for an item is not predictable, yet the expectation for future demand is probable, the item may still have ERS provided the managing DoD Component has a documented rationale that economically justifies retention and is available for audit purposes.

C2.8.1.1.1.3. CRS is stock above the AAO and above the ERS level, if one exists, that is held to support specific contingencies. To warrant contingency retention, the IMM shall be able to provide, if requested, rationale that identifies CRS

to a military contingency, security assistance, or general contingency, as described in the procedures below.

C2.8.1.1.2. To ensure that economic and contingency retention stocks correspond with current and future force levels, the DoD Components shall review and validate their methodologies for making economic and contingency retention decisions. The review shall occur at least annually, and the inventory management organization Commander, or designee shall attest to its validity in writing.

C2.8.1.1.3. IMMJs may retain wholesale stock up to the sum of the AAO, the ERS, and the CRS. Stocks above that sum are potential reutilization stock and shall be reviewed for transfer to the DRMS as soon as practicable.

C2.8.1.1.4. Personnel involved in wholesale materiel management functions should seek to eliminate wasteful retention practices and achieve cost savings in the retaining stock where possible. In particular, the DoD Components should ensure that item managers and distribution system managers process disposals in a timely manner. Generally, potential reutilization stock shall not be held by an IMM longer than 12 months after stratification, or by the distribution system longer than 6 months after a disposal release order is received from the IMM.

C2.8.1.2. Procedures

C2.8.1.2.1. The methodology used to set the maximum level of ERS for an item, that is, its economic retention level, should be based on an economic analysis that balances the costs of retention and the costs of disposal. The DoD Components should consider in the economic analysis the costs of retaining items, the potential long-term demand for the items, potential repurchase costs, and, for items essential to the operation of a weapon system, the expected life of the system, and the number of systems in use. The analysis may be accomplished on an item-by-item basis or for logical commodity groupings or for specific end item applications.

C2.8.1.2.2. For weapon-system items, economic retention levels shall be adjusted in proportion to changes in the number of systems in use if the future demand rate per system is known and not expected to change. If the change in the number of systems is due to weapon system phase-out, then the use of current or greater retention levels may be warranted if the future demand rates for items are expected to increase due to aging and/or the possibility of diminishing manufacturing sources exists.

C2.8.1.2.3. The DoD Components' review of economic retention methodologies should focus on:

C2.8.1.2.3.1. Better analyses supporting retention decisions by using forecasting models that take into account potential upward or downward trends in demand and/or the uncertainties of predicting long-term demand based on historical data.

C2.8.1.2.3.2. Improved estimates for costs used in retention decision-making.

C2.8.1.2.4. The DoD Components shall identify CRS according to these categories:

C2.8.1.2.4.1. Military contingency: assets needed to meet military contingencies for U.S. Forces.

C2.8.1.2.4.2. Potential security assistance: assets held in expectation of foreign military demand under U.S. security assistance, but not under CLSSA (i.e., non-CLSSA).

C2.8.1.2.4.3. General contingency: assets based on potential usefulness, for extreme reprocurement problems, or other special considerations involving non-military contingencies, such as civil emergencies or natural disaster relief.

C2.8.1.2.5. Items unique to a weapon system that is being withdrawn from use should be reviewed for possible contingency retention. Stocks of items with potential security assistance contingency retention may be held based on historical demand and anticipated sales from foreign non-CLSSA customers. Stocks of items with no contingency retention may be held for up to 1 year after the phase-out of the weapon system, with a written determination - renewable annually - by the Commander of the applicable IMM that holding the stocks is in the interest of the Department of Defense.

C2.8.1.2.6. Since the orientation of contingency retention is different from economic retention, the DoD Components' annual review should focus on verifying that the reason for contingency retention still exists and the coding of the reason for contingency retention is correct.

C2.8.2. Retail Retention

C2.8.2.1. Requirement. To guard against variable demand and the associated unnecessary costs of returning and later reordering items, retail supply activities may have retention levels for the demand-based items.

C2.8.2.2. Procedures. The DoD Components may retain items at a retail supply activity up to the sum of the approved war reserve level, the requisitioning objective, and a maximum of 24 months' worth at anticipated issue or wear-out rates. If the holding DoD Component does not authorize retail retention, the local retention level for an item is its requisitioning objective.

C2.9. ITEM REDUCTION

C2.9.1. Requirements

C2.9.1.1. The Department of Defense shall operate a Defense Inactive Item Program (DIIP) to identify and purge items from the defense supply system that are no longer required.

C2.9.1.2. The Department of Defense shall operate a standard program to record Interchangeable and Substitutable (I&S) items to:

C2.9.1.2.1. Phase out old and less capable items.

C2.9.1.2.2. Improve overall supply support by identifying I&S items.

C2.9.1.2.3. End duplication in the wholesale management of related items.

C2.9.1.3. Item reduction studies shall be conducted on groups of similar items to separate items that should be retained in the supply system from items that are not to be acquired for continued supply. The deletion of an item not authorized for acquisition from the supply system should be based on the value of its stock in relationship to the predicted time that attrition would take place and shall be coordinated with registered users.

C2.9.1.4. Items having I&S relationships shall be grouped into families composed of a master item and one or more related items. The IMM for an I&S master item shall also be assigned integrated management responsibility for the remaining items in the I&S family.

C2.9.1.5. Managing activities shall coordinate with the using Military Service and/or Agency on all new or revised I&S family structures before the entry of the I&S families in the DLIS Total Item Record, except those relationships coordinated through the DoD Standardization Program Item Reduction Study Process.

C2.9.2. Procedures

C2.9.2.1. Detailed procedures for operating the item reduction program are in Appendix 8 of DoD 4120.24-M (reference (j)).

C2.9.2.2. Detailed procedures for operating the I&S program are in the AMC-R 700-30/AFMC Instruction 20-101/MCO 4410.24/DLAR 4140.66.³

C2.9.2.3. The DoD Component DIIP program managers shall identify and select potentially inactive items.

C2.9.2.4. Items shall be referred to a Secondary Inventory Control Activity (SICA) through Inactive Item Review Notifications.

C2.9.2.5. Un-required items of supply shall be removed from the supply system.

C2.9.2.6. Although not included in an item reduction study, exact duplicate or obsolete items of supply uncovered by ICP technicians during normal item surveillance may be removed from the supply system by means of routine cataloging actions.

C2.9.2.7. Detailed procedures for operating the DIIP program are in DoD 4140.32-M (reference (k)).

³ Joint issuance AMC-R 700-30/AFMC Instruction 20-101/MCO 4410.24A/DLAR 4140.66, "Elimination of Duplication in the Management and Logistic Support of Interchangeable and Substitutable Items," August 15, 1997, can be found at website <http://www.e-publishing.af.mil/pubfiles/afmc/20/afmci20-101/afmci20-101.pdf>.

C3. CHAPTER 3

SOURCE

C3.1. SOURCING AND MATERIEL ACQUISITION

C3.1.1. Requirements

C3.1.1.1. The DoD Components shall develop and implement strategies for sourcing and acquiring materiel that provide for best value competition among materiel sources and minimize support costs of weapon systems throughout their life cycle. For reparable items, those strategies shall include acquiring assets from commercial vendors and remanufacturing serviceable assets from organic and commercial maintenance facilities.

C3.1.1.2. To ensure performance-based optimum life-cycle-support solutions, the DoD Components shall:

C3.1.1.2.1. Employ practices that promote the expansion of commercial sources to include developing alternative sources, competitive practices, and spare parts breakout programs.

C3.1.1.2.2. Develop programs that promote quality and cost-effectiveness throughout the supply chain.

C3.1.1.2.3. Integrate the information exchange between materiel managers and sourcing and acquisition managers to:

C3.1.1.2.3.1. Encourage coordinated sourcing and acquisition efforts.

C3.1.1.2.3.2. Provide timely, complete, and accurate data that promotes coordinated decision making.

C3.1.1.2.4. Develop management systems to maintain visibility and control over acquisitions from identifying the need through receiving the materiel.

C3.1.1.3. The DoD Components should structure sufficient flexibility into sourcing and materiel acquisition supply chains to be responsive to volatility in customer demand and supplier performance.

C3.1.2. Procedures

C3.1.2.1. The DoD Components should adopt practices that improve the efficiency and effectiveness of sourcing and acquiring materiel.

C3.1.2.1.1. Communication with customers, including performance feedback, should occur throughout the sourcing and acquisition process.

C3.1.2.1.2. Simulations and quantitative methodologies should be developed and used to improve sourcing and acquisition processes.

C3.1.2.2. Requirements and procedures involving remanufacturing at maintenance facilities are in section C4.2., below.

C3.2. MATERIEL SUPPORT ALTERNATIVES

C3.2.1. Selecting Materiel Support Alternatives

C3.2.1.1. Requirements

C3.2.1.1.1. In selecting materiel support alternatives, the DoD Components shall consider commercial and organic sources, as well as commercial/organic partnerships.

C3.2.1.1.2. The objective of evaluating and selecting materiel support alternatives shall be to ensure the timely, accurate, and complete satisfaction of customer requirements at minimum cost. Materiel support alternatives shall be assessed based on best value - considering, in addition to cost, factors such as the past performance of sources, interoperability, cost performance and control, quality assurance, surge capacity, and any considerations unique to the materiel or to the end item or application that the materiel will support.

C3.2.1.1.3. The DoD Components shall use, to the maximum extent possible, performance-based materiel support arrangements consistent with DoD policy preference for PBL support strategies. The use of performance-based contracts or organic arrangements (or suitable alternatives such as Military Service-level agreements) shall reflect required outcomes as their objective (and not level of effort).

C3.2.1.1.4. The DoD Components shall ensure that their logistics processes allow for performance-based arrangements between customers and support

providers (i.e., materiel managers, distribution managers, and maintenance managers), to obtain maximum supply chain flexibility in lead time, repair production and delivery strategies to offset near-term demand volatility.

C3.2.1.2. Procedures

C3.2.1.2.1. The DoD Components shall balance support goals, total supply chain costs, and performance factors in determining the best value materiel support alternatives for meeting customer requirements. This assessment process shall be consistent with the analytical requirements as described in section C7.3. and the following specific guidelines:

C3.2.1.2.1.1. The scope of the materiel support alternative analysis shall extend from the point of producing materiel through all echelons of managing to delivering materiel to the ultimate customer and concurrently shall comprehend all applicable enterprise and program performance objectives and cost trade-offs.

C3.2.1.2.1.2. The assessment of alternatives is a recurring process as performance and costs for sources may change significantly over time.

C3.2.1.2.1.3. Evaluating and selecting support alternatives may be accomplished on an item-by-item basis or for logical groupings with common characteristics or for specific end item applications.

C3.2.2. Materiel Support Alternatives Other Than Stocking Inventory at DoD Facilities

C3.2.2.1. Requirements

C3.2.2.1.1. Alternatives for obtaining materiel support, other than stocking inventory at DoD facilities, shall be used wherever they are the best value alternative for providing materiel support that meets weapon system, equipment, and personnel readiness goals.

C3.2.2.1.2. Those materiel support alternatives include:

C3.2.2.1.2.1. Satisfying demands by placing orders with suppliers for direct shipment to customers.

C3.2.2.1.2.2. Using commercial distribution systems.

C3.2.2.1.2.3. Purchasing locally readily available materiel, primarily at retail supply activities.

C3.2.2.1.2.4. Relying more on other Government activities for common support requirements.

C3.2.2.1.2.5. Using General Services Administration (GSA) Federal Supply Schedules.

C3.2.2.1.2.6. Having contractor logistics support contracts, including but not limited to performance-based contracts stemming from PBL strategies.

C3.2.2.1.2.7. Having contractor support for design unstable assemblies and components.

C3.2.2.1.2.8. Using organic and contract manufacture-on-demand and other flexible manufacturing technology capabilities.

C3.2.2.1.2.9. Using host-nation support and cross-Servicing agreements.

C3.2.2.1.3. Wherever possible, consistent with mission requirements and best value considerations, supply chain management activities shall reduce or eliminate Government facilities or capabilities that duplicate resources available commercially or at other Government activities.

C3.2.3. Procedures

C3.2.3.1. Each of the DoD Components shall implement procedures applicable to both new and currently managed items to institutionalize the process of evaluating and selecting support alternatives.

C3.2.3.2. The DoD Components shall review the validity of decisions regarding the selection of support alternatives other than DoD materiel stockage. Such reviews may be initiated based on input of information from operational customers, from industry surveys, or other sources. The objective of such reviews is to ensure continued support of customer needs and cost-effective use of scarce resources. Reviews may be conducted on an individual item or item grouping basis.

C3.2.3.3. The DoD Components should review and adjust current materiel requirements when support alternatives other than DoD stockage have been selected.

Sufficient time should be allowed to decrease DoD stockage requirements and avoid unnecessary acquisition, repair, or storage costs.

C3.2.3.4. At a minimum, review procedures shall include:

C3.2.3.4.1. Probability of Future Requirements. The review should validate the potential for a future need for support prior to adopting any support alternative.

C3.2.3.4.2. Availability of Commercial Support. Market research and surveys should be conducted to determine market availability, present of in-place commercial distribution systems, and vendor interest in providing support.

C3.2.3.4.2.1. Specific consideration shall be given to items with high potential benefits from using commercial stockage alternatives such as: consumable items that are commercial in nature, bulky fast moving, hazardous, fragile, and/or have a short shelf-life and commercial products substitutable for military specification (MILSPEC) products so that commercial suppliers may be used.

C3.2.3.4.2.2. Even though Military Specification items are currently being used to meet customer requirements, consideration should be given to more cost-effective support alternatives using commercial items if they may meet customer requirements.

C3.2.3.5. In determining cost-effectiveness of stockage alternatives, the DoD Components shall include all applicable elements of cost and cost savings (e.g., inventory holding costs, and second destination transportation) in determining responsiveness, including timeliness and conformance with mission requirements.

C3.2.3.6. Calculations of savings obtained through reductions in inventory stockage as a support alternative shall take into account additive costs, if any, (e.g., increased item price, or higher administrative costs, etc.) before utilizing support alternatives.

C3.2.4. Local Purchase of Materiel Support

C3.2.4.1. Requirements

C3.2.4.1.1. At the retail level, selecting local purchase of materiel and supplies as a support alternative may be considered if such a determination is demonstrated to be cost-effective for specific items or logical groupings of items. DFARS 208.7003-1 (reference (1)) prohibits the local purchase of items that are

critical to the safe operation of a weapon system, have special security characteristics, or are dangerous (e.g., explosives, munitions).

C3.2.4.1.2. Contract negotiation and administrative costs associated with local purchase should be considered in determining whether the use of local purchase authority is more cost-effective than utilizing other established supply chain sources.

C3.2.4.1.3. Items recurrently purchased locally must conform with the requirements of section C8.1., below.

C3.2.4.1.4. Retail activities may notify the associated IMM when locally purchasing a centrally managed item so that the IMM can adjust future forecasts or, where applicable, improve PBL contracts to recapture retail support.

C3.2.4.2. Procedures

C3.2.4.2.1. Purchasing tools such as Government credit cards, GSA schedules, and in-place or corporate contracts should be used to help minimize local purchase administrative costs.

C3.2.4.2.2. The DoD Components should ensure that local activities have access to a common repository of potential commercial sources to support materiel support requirements. Such tools as GSA Advantage, DoD Electronic Mall (EMALL), and other on-line systems should be considered.

C3.2.4.2.3. DoD 4140.27-M (reference (f)) addresses the local purchase of shelf-life items.

C3.2.5. DoD Stockage of Inventories

C3.2.5.1. Requirements

C3.2.5.1.1. The DoD Components may stock items at wholesale and retail levels of supply when other support alternatives have been assessed and have been determined not to meet mission requirements or are not cost-effective.

C3.2.5.1.2. For an item that may not be supported using alternative strategies, the DoD Components shall develop and use economic and essentiality criteria to determine both stockage appropriateness and computational methodology.

C3.2.5.1.3. The stockage decision criteria of the DoD Components shall address a variety of factors, including identifying those items critical to safely operating

weapon systems or equipment, items requiring special security controls, and items constituting environmental and personal hazards. These include dangerous materiel such as explosives, munitions, chemicals or biological agents and nuclear materiel.

C3.2.5.2. Procedures

C3.2.5.2.1. The DoD Components shall periodically review the validity and currency of materiel stockage decisions. Generally, reviews should be conducted on an item-by-item basis. Items may be divided into homogeneous groupings, based on clearly described criteria, and analysis results applied to item groupings. Reviews should be conducted as follows:

C3.2.5.2.1.1. Items reviewed for potential DoD stockage shall be categorized as "stocked" or "non-stocked."

C3.2.5.2.1.2. All costs attributable to storing and shipping items in inventory (e.g., breakage, shelf-life expiration, hazardous materiel storage facilities, and disposal) should be considered in determining cost-effectiveness of DoD stockage of inventory.

C3.2.5.2.1.3. The stockage classification of all demand-based and limited demand items shall be reviewed at least annually.

C3.2.5.2.1.4. Demand-based items failing to meet the economic criteria for demand-based stockage shall be reclassified as either limited-demand requirements based on military mission essentiality, non-demand-based insurance requirements, or as non-stocked.

C3.2.5.2.1.5. Limited demand items that meet the economic criteria for demand-based stockage may be reclassified accordingly. Limited demand items that do not experience recurring demands, but continue to be essential should be reclassified as "non-demand-based insurance items." Insurance item requirements shall be reviewed prior to initiating stock replenishment.

C3.2.5.2.1.6. Planned program requirements shall be reviewed at the scheduled completion of the supported program, at least annually. Planned program requirements shall be reduced to zero at program completion.

C3.2.5.2.1.7. LOT purchase requirements and related inventory stockage shall be reviewed annually.

C3.2.5.2.1.8. Non-stocked items with demands shall be reviewed at least annually. Non-stocked items without demands shall be reviewed, according to DIIP procedures.

C3.2.5.2.2. Requirements levels for stocked items shall be developed using readiness-based, demand-based, limited-demand, or non-demand-based computational methodologies. Requirements determination methodology shall be consistent with the reason for stockage.

C3.2.5.2.3. Readiness-based computational methodology is preferred for stocked items that are essential to weapons systems support and have sufficient forecasted future requirements to warrant economic stockage.

C3.2.5.2.4. Unless stocked items use readiness-based requirements methodology, such items having sufficient forecasted recurring requirements to warrant economic stockage shall use demand-based computational methodology.

C3.2.5.2.5. Essential, non-weapon system items with low demand that do not economically justify being stocked and may not be supported through alternatives other than DoD stockage, may be stocked as "limited demand items." The DoD Component requirements computational methodologies shall provide minimum stockage for those items.

C3.2.5.2.6. Items stocked to fill nonrecurring demands, including insurance requirements, planned program requirements, and LOT requirements shall use a non-demand-based requirements development methodology.

C3.2.5.2.7. Items that do not have sufficient future requirements to warrant economic stockage and are categorized as "non-essential" shall be non-stocked.

C3.2.5.2.8. Inventory stockage of commercially available items for reasons other than cost-effectiveness should be limited to minimum stockage necessary for readiness (i.e., war reserve requirements).

C3.2.6. Retail Materiel Stockage

C3.2.6.1. Requirements

C3.2.6.1.1. The following additional requirements shall govern the stocking items at the retail level throughout the Department of Defense, regardless of the funding source for the inventory.

C3.2.6.1.1.1. Secondary item stockage for retail levels, which are categorized as either intermediate or consumer level, shall provide optimum stockage for each materiel item or grouping of items by incorporating a balance among specified performance goals and economy. Performance goals should include full consideration of military essentiality.

C3.2.6.1.1.2. Stocking items at the consumer level of supply on any basis other than demand shall be minimized. Operational considerations may require limited stockage of non-demand based items at consumer levels. The justification for such stockage must be developed and maintained for review at the location of the consumer activity responsible for managing such inventory. When stocking non-demand-supported items is required at the consumer level, stocking the same item at the supporting intermediate level shall normally be computed on a demand basis.

C3.2.6.1.1.3. An exception to the non-demand-supported item requirements above, is authorized for initial provisioning requirements items. If the forecasted (as opposed to actual) demand rate for a provisioned item would qualify the item for stockage, then the item inventory may be positioned at both the intermediate and consumer levels during the demand development period. Those initial provisioning items that do not qualify for stockage based on forecasted demand may be positioned at either the intermediate or consumer level as non-demand-supported during the demand development period.

C3.2.6.1.2. At retail-level stock points, subsidiary inventories in self-service-type activities, shop stores, or similar activities shall be limited to an operating level that is based on demands at that subsidiary point. Backup stocks may be maintained at a central location in support of those inventories.

C3.2.6.2. Procedures

C3.2.6.2.1. At the intermediate level of retail inventory, stockage computations shall employ actual demand experience in the development of operating levels. Additionally, variability of demand and the OST shall be considered in developing safety levels and the OST levels to minimize total variable cost for any given investment, weapon system performance objective or fill-time objective.

C3.2.6.2.2. Requirements determinations for a retail level of inventory shall be accomplished according to subparagraph C2.6.2.1.2. and paragraph C2.6.4., above, even though stockage decisions or computations may be accomplished by a program manager, an ICP, or an activity other than that at which the stocks shall be held.

C3.3. ACQUISITION INTERFACES

C3.3.1. Requirements

C3.3.1.1. The DoD Components shall ensure that materiel managers actively interface with the program manager and participate in acquisition logistics planning as early as feasible for each weapon system acquisition program.

C3.3.1.1.1. According to DoD Directive 5000.1 (reference (m)), program managers shall consider performance-based strategies for the acquisition and sustainment of products and services that are tailored to their individual programs. Accordingly, program managers shall collaborate with Military Service and DLA materiel managers and invite their participation in:

C3.3.1.1.1.1. Developing and selecting performance-based materiel support strategies that optimize total system availability while minimizing cost and logistics footprint. The process of developing such strategies should integrate weapon system-oriented approaches with commodity-oriented approaches to derive the best value blend of existing and evolving, organic and commercial, weapon system-unique and common support structures. Consideration should be given to existing organic supplies.

C3.3.1.1.1.2. Developing performance arrangements with public support providers and/or performance contracts with private sector support providers, that shall ensure that weapon systems and equipment are fully supported to meet their established performance objectives when fielded.

C3.3.1.1.2. Materiel managers should coordinate with program managers or product support integrators selected by program managers on the developing and maintaining supply chains that help minimize total ownership costs and provide best value support to weapon systems throughout their life cycles.

C3.3.1.1.3. Materiel managers may designate a focal point to represent the materiel management community on all associated supply chain management activities including integrated product teams and acquisition logistics management teams and provide supply management contract requirements, technical and quality data, and historical supply data, as required.

C3.3.1.2. Materiel managers shall maintain analytical tools and historical experience data, particularly comparisons between projected quantitative factors developed during the acquisition processes and actual experience.

C3.3.1.2.1. Materiel managers with the program manager should maintain a robust data model and repository or guaranteed access to one that includes the full set of logistics support data acquired during acquisition process to assess life-cycle and total ownership consequences.

C3.3.1.2.2. All data shall be organized to aid in performing supply chain analysis, supportability analysis, and other analyses during the weapon system acquisition process.

C3.3.1.3. Materiel managers should assess design stability during the acquisition development phase and determine financial risks that are applicable to life-cycle support.

C3.3.1.3.1. Extrapolations and deviations from the engineering data and logistics requirements developed during the weapon system acquisition process shall be documented, including the basis for any changes.

C3.3.1.3.2. Engineering changes developed for a weapon system that is organically supported shall be coordinated between the materiel manager and the developers of the change to avoid unnecessary future procurements of planned item phase-outs.

C3.3.2. Procedures

C3.3.2.1. Materiel managers or their focal points shall ensure that:

C3.3.2.1.1. They are participating members of the acquisition logistics management team beginning in concept exploration phase, and continuing into modifications and engineering changes to weapon systems.

C3.3.2.1.2. Supporting IMM have current information regarding acquisition and support decisions applicable to systems that are changing or being phased out.

C3.3.2.1.3. They participate fully in formulating supply chain management concepts and developing baseline comparison systems by providing applicable historical data on similar and predecessor systems.

C3.3.2.1.4. Weapon system solicitation documents (i.e., requests for proposals) including the statement of work and contract data requirements lists adequately reflect the requirement to minimize total ownership costs of materiel support, as defined by the materiel manager.

C3.3.2.2. Materiel managers or their focal points shall ensure that provisioning goals and objectives consistent with system readiness goals and objectives and supply chain management objectives are provided for inclusion in the product support strategy, beginning in the concept development phase.

C3.3.2.3. Materiel managers should participate with Military Parts Control Advisory Groups and Command Standardization Office representatives in the parts control program established. Emphasis should be placed on review of the program parts selection list and the non-standard part approval request at or before preliminary design review to ensure parts control and standardization is being adequately applied.

C3.3.2.4. Materiel managers shall maintain weapon system application files, pipeline times, and associated logistics data containing predicted and actual weapon system experience data.

C3.3.2.4.1. Materiel managers, with program managers, should review predicted and actual data to evaluate reliability and maintainability performance and the effectiveness of supply chain support to system readiness objectives.

C3.3.2.4.2. Materiel managers should assess key supply chain management metrics to evaluate customer wait time and weapon system readiness objectives.

C3.3.2.5. The comparative information shall be provided to support logistics planning for supportability starting during the early concept exploration phases. Those comparisons shall also be used to evaluate the accuracy and effectiveness of supply chain management support decisions.

C3.3.2.6. Materiel managers shall ensure that any proposed changes to the engineering data or logistics planning are documented and coordinated. They shall:

C3.3.2.6.1. Provide necessary notice and documentation to the appropriate IMM and any other concerned logistics manager for coordination before implementation.

C3.3.2.6.2. Maintain an audit trail of any changes that are made, to include the rationale for change.

C3.3.2.6.3. Ensure that the designated weapon system and system component maintenance facilities are notified in sufficient time for them to make needed adjustment to repair requirements and specifications.

C3.4. INTEGRATED MATERIEL MANAGEMENT

C3.4.1. Requirements

C3.4.1.1. A single IMM or commercial equivalent shall manage each item in the DoD supply system. Determining management responsibility shall be based on item management coding criteria, as agreed on by the DoD Integrated Materiel Management Committee and approved by the Deputy Under Secretary of Defense for Logistics and Materiel Readiness (DUSD(L&MR)).

C3.4.1.2. The DoD Components shall use the supply support request process to ensure that sufficient stock shall be on-hand to satisfy initial requisitions received from the user and/or customer.

C3.4.1.3. DUSD(L&MR) approval is required for exemptions to integrated materiel management. Exemptions shall be considered for purposes of national security or war conditions.

C3.4.1.4. To achieve integrated management, it may be necessary to reassign the logistics management of a given item from one DoD Component to another.

C3.4.1.4.1. Logistically reassigning items shall be done on a non-reimbursable basis and all the wholesale assets in support of existing supply levels of the losing manager will transfer to the gaining manager.

C3.4.1.4.2. The losing manager shall continue replenishment actions through the effective transfer date minus 30 days so that the minimum stocks transferred shall satisfy the pipeline requirement. In addition, the responsible procurement office of the losing manager shall process all uncompleted contracts covering assets to be transferred.

C3.4.1.4.3. The losing manager shall retain responsibility for engineering support, configuration management, and current technical data in support of the gaining manager for transferred consumable items. The losing manager shall also retain responsibility for any special tooling, special test equipment, and related Government property used to produce a consumable item.

C3.4.2. Procedures

C3.4.2.1. The 1971 Agreement on Supply Management Relationships (Appendix 7) between the Department of Defense and the GSA serves as the basic authority for implementing Integrated Materiel Management.

C3.4.2.2. DoD 4140.26-M (reference (n)) shall establish integrated materiel management assignments by Federal Supply Classification (FSC).

C3.4.2.3. DoD 4000.25-2-M (reference (g)) shall provide procedures for logistics reassignment of both consumable and repairable items.

C3.5. QUALITY PROGRAMS

C3.5.1. Requirement. Only secondary items that conform fully to contract specifications shall enter the DoD supply system.

C3.5.2. Procedures

C3.5.2.1. The DoD Components shall establish and implement quality programs to ensure the quality of secondary items and conformance to contract specifications.

C3.5.2.2. Such programs shall apply to all applicable segments of the acquisition process. Acquisition process segments include pre-contract award, contract award, contract administration, supply management, and feedback.

C3.5.2.3. The DoD Components shall develop action plans to correct deficiencies identified in the quality process and ensure continuous improvement in the quality of secondary items. Those plans should include performance measures and milestones in applicable acquisition phases and should document actions and accomplishments that carry out quality program objectives.

C3.5.2.4. Applicable quality assurance methods shall be used to ensure that items conform to contract and technical requirements. Such methods include contractor selection and qualification programs; proper selection and application of contractual quality requirements; pre-award surveys; Government inspection at source or destination; and pre-acceptance and post-acceptance testing.

C3.5.2.5. Such quality assurance techniques and testing should stress conforming critical application items to contract and technical requirements. Particular attention should be given to past performance when allocating quality assurance and testing resources among contractors and items.

C3.5.2.6. Items not conforming to contract specifications shall be identified and corrective actions shall be taken under the provisions of the contract. Quality assurance is described in Part 46 of the FAR and Part 246 of the DFARS (references (o) and (p)).

C3.5.2.7. The DoD Components shall establish criteria and methods to identify contractors who consistently fail to meet contract requirements and prevent future contract awards to such contractors.

C3.5.2.8. The DoD Components shall measure the quality of secondary items and document trends in item nonconformance. Particular emphasis shall be placed on measuring and documenting trends for "critical nonconformance" and "major nonconformance," as defined in reference (p).

C3.5.2.9. Distribution depots and storage locations shall establish quality methods to verify that items accepted, stored, packaged, repackaged, marked, and issued conform with applicable quality and technical requirements. Emphasis should be placed on critical application items.

C3.5.2.9.1. Subparagraph C3.8.1.6., below, addresses the reporting and processing of quality deficiencies uncovered during receipt processing.

C3.5.2.9.2. Subparagraph C5.6.1.5., below, addresses quality control of materiel in storage.

C3.5.2.10. Aggressive measures should be undertaken at both wholesale and retail levels to identify and remove nonconforming items from the supply system.

C3.6. DIMINISHING MANUFACTURING SOURCES AND MATERIAL SHORTAGES (DMSMS)

C3.6.1. Requirements

C3.6.1.1. The loss or impending loss of manufacturers of items or suppliers of items or raw materials may cause material shortages that endanger a weapon system's or equipment's development, production, or post-production support capability. The DoD Components shall proactively take timely and effective actions to identify and minimize the DMSMS impact on DoD acquisition and logistics support efforts.

C3.6.1.2. Each DoD Component shall develop a process to resolve problems created by DMSMS and reduce or eliminate any negative impacts. The DoD Components shall proactively consider DMSMS through a system's life cycle by anticipating potential DMSMS occurrences and taking appropriate logistics, acquisition, and budgeting steps to prevent DMSMS from adversely affecting readiness or total ownership cost.

C3.6.1.3. The DoD Components shall aggressively pursue the actions listed in paragraph C3.6.2.4., below, for DMSMS items, particularly, when those items threaten to degrade weapon system readiness below established goals.

C3.6.1.4. The DoD Components shall establish DMSMS programs that shall reduce or eliminate the cost and schedule impacts of all identified DMSMS problems and help ensure that DMSMS problems do not prevent weapon system readiness and performance goals from being met.

C3.6.2. Procedures

C3.6.2.1. The DUSD(L&MR) shall exercise authority for directing and managing the overall DMSMS program, including establishing and maintaining implementing regulations.

C3.6.2.2. Each DoD Component shall designate a focal point to plan and coordinate actions to minimize the impact of DMSMS. Such actions include:

C3.6.2.2.1. Promoting technical efforts (such as using emulation and generic arrays), non-technical efforts (such as sharing Government and industry reports on DMSMS), and logistics research and development efforts to identify emerging technology that will neutralize or minimize DMSMS.

C3.6.2.2.2. Assessing DMSMS impacts on new DoD weapons systems by:

C3.6.2.2.2.1. Participating in post-production support planning activities conducted as part of the logistics support program and recorded in product support planning documentation.

C3.6.2.2.2.2. Ensuring, to the maximum extent practical through parts screening for potential technology obsolescence, that identified DMSMS items are not included in DoD systems during design, redesign, or production. This includes screening parts for current obsolescence, and for items that may be obsolete in the near future (up to 5 years hence) and assessing the vulnerability of the parts to become obsolete. If an identified DMSMS item is not dropped during design, redesign, or production, the procuring activity shall ensure that there is continuous part availability and post-production support.

C3.6.2.2.3. Establishing the most cost-effective solution consistent with mission requirements when an item is identified as DMSMS.

C3.6.2.2.4. Conserving existing and on-order stocks by challenging suspected excessive requisitions, limiting automatic issue to established users with known requirements, and issuing on a case-by-case basis to other users until a cost-effective solution to the DMSMS problem may be implemented.

C3.6.2.2.5. Ensuring that DMSMS information is effectively communicated and exchanged within the Department of Defense, with other Government organizations, and with industry through the maximum use of alerts and the Government-Industry Data Exchange Program (GIDEP).⁴

C3.6.2.2.5.1. At a minimum, the information should be relative to the discontinuance of manufacturers' products and identify the item, its technical specifications, the name of the manufacturer, when the product will be discontinued, where the product is used if known, and any existent Government contracts for the product itself or form, fit, and function replacements.

C3.6.2.2.5.2. When an item is endangered by DMSMS, weapon systems program managers and item managers should be notified whenever possible within sufficient time to take action before the item is no longer available.

C3.6.2.3. Commanders of activities with responsibility for design control, acquisition, and management of any centrally managed item used within weapon systems or equipment shall implement the DMSMS program by establishing internal procedures.

⁴ See website at <http://www.gidep.corona.navy.mil/gidep.htm>.

C3.6.2.4. When an item is identified as DMSMS, the DoD Components should implement the most cost-effective solution consistent with mission requirements from the following:

C3.6.2.4.1. Encourage the existing source to continue production.

C3.6.2.4.2. Use the current item specification to find another source. A smaller company might undertake production that no longer is profitable for a larger company.

C3.6.2.4.3. Convert the existing item specification to a performance-based specification, which provides more flexibility in acquisition approaches and facilitates identifying another source.

C3.6.2.4.4. Obtain an existing substitute item that will perform fully (in terms of form, fit, and function) in place of the DMSMS item or one that, while it would satisfy one or more functions, might not necessarily perform satisfactorily in all of them (limited substitute).

C3.6.2.4.5. Redefine requirements through applicable engineering support activities, and consider buying from a commercial source. This redefinition may include MILSPEC tailoring. Such a course of action might induce the emergence of additional sources.

C3.6.2.4.6. Use current manufacturing processes to produce a substitute item (form, fit, and function) for the unobtainable item. Using emulation technology is particularly effective in producing substitute microcircuits. Through microcircuit emulation, inventory reduction may be achieved as obsolete items may be replaced with state-of-the-art devices that may be manufactured and supplied on demand. Emulation may be considered a more preferred alternative to subparagraph C3.6.2.4.4., above, if the part may be used in a wide variety of functions.

C3.6.2.4.7. Make a "bridge buy" of a sufficient number of parts to allow enough time to develop another solution.

C3.6.2.4.8. Make a LOT buy. Based on estimated life-of-system requirements, the DoD Components may make a onetime procurement of enough material to last until the end items being supported are no longer in use. LOT buys shall include sufficient material to be provided as Government-Furnished Material (GFM) for repair and for piecework applications in the procurement of additional systems, equipment, spare assemblies, and subassemblies. The decision to make a LOT

buy and the quantity procured should depend on the availability and cost of assets from all sources, including repair, reclamation, and de-installation.

C3.6.2.4.9. If a contractor using Government-Furnished Equipment (GFE) stops production, reclaim the GFE and reissue it to a new source to help establish production capabilities.

C3.6.2.4.10. Reclaim DMSMS parts from marginal or out-of-service equipment or, when economical, from equipment that is in a long supply or potential excess position.

C3.6.2.4.11. Reverse engineer the item to develop an exact replica of the item through a review of available technical data, testing, physical disassembly and inspection, and analysis of functions performed by the item.

C3.6.2.4.12. Modify or redesign the end item to drop the part in question or replace it with another. That option may become more cost-effective if the end item contains several DMSMS parts.

C3.6.2.4.13. Replace the system in which the DMSMS item is used. That alternative may require extensive cost analysis.

C3.6.2.4.14. Require the using contractor, through contractual agreements, to maintain an inventory of DMSMS items for future DoD production demands. That option shall be weighed against the cost of the Department of Defense maintaining an inventory and supplying the items as GFM.

C3.6.2.4.15. Obtain a production warranty, if possible, from the contractor to supply the item or items for a specified time (life of equipment) irrespective of demands.

C3.6.2.5. The DoD Components shall send to the cognizant IMM the information that was originally obtained from industrial sources about an actual or prospective announcement of a manufacturer's intent to stop production. This information shall allow DMSMS broadcast alerts to be generated, if applicable. The cognizant IMM shall notify the GIDEP to establish a DMSMS case.

C3.6.2.6. The DoD Components shall ensure that the ICP maintains post-action surveillance throughout the life of DMSMS items in the logistics system.

C3.6.2.7. The DoD Components and Security Assistance customers who use the specific items shall respond to requests for requirements information needed to

decide the best course of action for ensuring continued supply of DMSMS items. Timely responses are required to meet contractor-imposed final action deadlines. For DMSMS cases involving multiple parts and multiple users, Integrated Product Teams shall be established to coordinate DoD assessment and response to ensure that adequate logistics support may be maintained for affected weapon systems.

C3.7. MANAGEMENT OF ON-ORDER ASSETS

C3.7.1. Requirements

C3.7.1.1. The IMMs shall take timely action to reduce or cancel orders (purchase requests) before contract award and to consider terminating items under contract when changes in mission and consumption factors; etc., reduce requirements for secondary items. When determining the cost to accept potentially unneeded items, the IMMs shall calculate all costs of undelivered materiel plus the cost of receiving, holding, and disposing of the materiel.

C3.7.1.2. Applicable records shall be maintained to ensure accountability of termination and/or reduction decisions and the coordination of associated actions across functional areas. Termination and/or reduction decisions shall be reached and implemented in a timely manner.

C3.7.1.3. Visibility of procurement assets (all assets a vendor is delivering to satisfy a DoD contract, as well as assets the Department of Defense gives to vendors to produce other assets in support of DoD requirements) shall be provided to the IMMs to help in filling customer orders, forecasting depot receipt workload, and assessing future item support postures.

C3.7.2. Procedures

C3.7.2.1. All IMMs shall establish materiel purchase request and/or contract reduction coordinators in a sufficiently high-management position to ensure management emphasis on prompt reduction and/or cancellation of orders.

C3.7.2.2. The requirements review process at the IMMs shall identify items for which requirements have been reduced prior to submitting a purchase request, as well as during all phases of soliciting and awarding a contract. The IMMs shall establish reasonable thresholds for that review to ensure the graduated application of management effort to verify requirements based on the dollar value of the requirement. Particular emphasis shall be placed on reducing or cancelling purchase requests prior to contract award to avoid potential liability for contractor termination costs.

C3.7.2.3. If a contract has not yet been awarded and inventory management reviews disclose that requirements for items on order have been reduced or eliminated, reduction or cancellation of the order shall promptly be requested of the contracting officer. Particular emphasis shall be given to validating requirements data (including security assistance and GFM requirements) used as the basis for orders exceeding \$100,000. Follow-up action on all requests for order reduction or cancellation should be pursued to ensure that contract award quantities show reductions in requirements.

C3.7.2.4. If a contract has been awarded and inventory management reviews disclose that the requirement for items under contract no longer exists, the contracting officer shall request a termination action. Termination action shall be pursued if determined to be cost-effective and in the best interest of the U.S. Government. Cost-effectiveness should be determined by comparing what it will cost-to-hold items in inventory versus the cost to terminate the same items from contracts, plus re-procurement costs, if known. In deciding whether to terminate items under contract, consider such factors as:

C3.7.2.4.1. The cost to complete the contract including ownership costs (storage and interest; etc.) versus termination costs, plus re-procurement costs, if applicable.

C3.7.2.4.2. The potential need for the items on other contracts (including production contracts with GFM requirements). Using the items on higher assemblies shall be considered.

C3.7.2.5. Where feasible, estimated termination costs shall be obtained in a timely manner in order to establish the cost-effectiveness of termination. In general, termination costs should be obtained within 21 days of a request for termination action. If termination costs are not obtainable in a timely manner, estimates based on termination cost models may be used.

C3.7.2.6. Termination decisions should generally be reached within 30 days of generation of a notification that items under contract should be considered for termination.

C3.8. RECEIPT PROCESSING

C3.8.1. Requirements

C3.8.1.1. All receipts of materiel at DoD distribution depots or at other wholesale or retail storage sites, (hereafter referred to collectively as "storage activities") shall be recorded in DoD total item property records and shall be visible to all requiring activities. All receipts of materiel at final destinations shall be acknowledged by immediate issuance of an electronic materiel receipt acknowledgment. Use of other than electronic data interchange to communicate receipt transactions and related documents is authorized only in exceptional circumstances.

C3.8.1.2. Receiving activities should record receipts and make associated assets visible from the point of inspection and/or acceptance within 24 hours of receipt (holidays and weekends excepted). The accounting and finance office shall be notified of the item receipt within the 24-hour period.

C3.8.1.3. Due-in Records

C3.8.1.3.1. All anticipated receipts of materiel from any source (i.e., procurement, redistribution, requisitioning, and returns) shall be recorded as "materiel due-in." Accounting for progress payments made to contractors shall be classified as "prepaid assets," rather than as "inventory consistent with DoD inventory valuation policy."

C3.8.1.3.2. A current record of all anticipated materiel receipts shall be available to receiving storage activities.

C3.8.1.3.3. Suspense procedures shall be established based upon the initial notification of shipment to monitor materiel receipt and ensure proper accountability of intransit assets.

C3.8.1.4. Receipt Processing Time. Wholesale activity receipt processing performance shall be measured in terms of the goal to process receipts and reflect them with minimal delay as on-hand assets available for issue.

C3.8.1.5. Receipt Processing Controls

C3.8.1.5.1. Receipt control procedures shall be established to record the status of materiel in the storing cycle.

C3.8.1.5.2. When materiel directed for issue is denied because there is insufficient physically stored materiel to fill the requirement, the release of new receipts, which may not have been placed in their storage locations, is authorized to satisfy that requirement.

C3.8.1.5.3. The receiving process should use technological innovations, such as bar coding and microcircuit labeling to reduce the incidence of record inaccuracy and to hasten the receipt posting process. The receiving areas of storage activities should be physically configured to optimize the use of such innovations.

C3.8.1.6. Receipt Inspection and Discrepancy Reporting

C3.8.1.6.1. When receiving shipments of materiel from commercial sources that require inspection and/or acceptance at destination, the inspection and/or acceptance shall be performed as part of the receiving process.

C3.8.1.6.2. Materiel receipt transactions shall reflect the actual condition of the materiel received based on inspection.

C3.8.1.6.3. All discrepant receipts shall be reported under established DoD Regulations covering supply, transportation, or quality discrepancies.

C3.8.1.6.4. DoD activities responsible for resolving discrepancy reports should have a capability to automatically receive deficiency reports, store and process (e.g., categorize, sort, and access related deficiencies), assign investigations, and automatically route and track disposition.

C3.8.1.7. Management of Receiving Procedures. Receiving procedures shall be managed using the functional system configuration control process of the Defense Logistics Management System (DLMS). (See section C8.6., below.)

C3.8.2. Procedures. The detailed procedures for receipt processing are in DoD 4000.25-2-M (reference (g)).

C4. CHAPTER 4

MAKE/MAINTAIN

C4.1. MAKE/MAINTAIN MATERIEL

C4.1.1. Requirements. The DoD Components should provide for the management of materiel for the production, manufacturing, repair, modification, overhaul, and testing functions performed at organic or private sector facilities or through public and private partnerships at those facilities.

C4.1.1.1. The DoD Components shall seek to optimize their relationships with commercial sources providing the materiel that DoD customer use. In doing so, they should differentiate between make-to-stock, make-to-order, and engineer-to-order materiel requirements. They should:

C4.1.1.1.1. Establish make-to-order relationships with commercial sources when those sources are the preferred support alternative. Contractor logistics support (CLS) contracts and DVD contracts are examples of make-to-order relationships where the DoD supply chain relies on external sources to fill customer demand instead of internal inventories.

C4.1.1.1.2. Make economical make-to-stock buys from commercial sources.

C4.1.1.2. In the case of depot-level reparable items, which are maintained by organic and commercial maintenance facilities, DoD materiel managers shall seek to optimize their interfaces with those facilities. They should work with:

C4.1.1.2.1. Maintenance facilities to ensure the proper scheduling and completion of make-to-order and make-to-stock workloads to meet customer requirements within negotiated performance metrics.

C4.1.1.2.2. Organic maintenance facilities and commercial maintenance facilities authorized to order parts from the DoD supply system to align parts support with scheduled maintenance workloads and apply kitting and bills-of-material (BOMs), as appropriate.

C4.1.2. Procedures

C4.1.2.1. The detailed requirements and procedures for interfaces between materiel managers and maintenance facilities are in section C4.2., below.

C4.1.2.2. The detailed requirements and procedures for make-to-stock buys with commercial sources are in section C4.3., below.

C4.1.2.3. The detailed requirements and procedures for make-to-order relationships with commercial sources are in section C4.4., below.

C4.1.2.4. The DoD Components should have the capability to rapidly produce products to meet new, unique customer requirements (i.e., engineer-to-order materiel requirements) through contingency contracts with private sector manufacturers or agreements with organic manufacturing sources. That capability should include access to any engineering resources that might be required (for example, access to engineering drawings).

C4.1.2.5. The detailed requirements and procedures for kitting are in section C4.5., below.

C4.2. MAINTENANCE INTERFACES

C4.2.1. Requirements

C4.2.1.1. After reparable items are provisioned, the DoD Components shall rely on organic and commercial maintenance facilities as the primary sources of serviceable assets to sustain operations. The DoD Components should only use procurement to replace unserviceable assets that can not be repaired economically and to meet new customer requirements not addressed in initial provisioning.

C4.2.1.2. With regard to source of repair, materiel managers shall use designated sources of repair, which may be organic or commercial facilities.

C4.2.1.3. The Military Services shall provide for direct and continual information exchange between their maintenance and materiel managers. To ensure effective and efficient repair of components and assemblies and optimal utilization of depot resources, materiel managers shall provide maintenance facilities with all information required for production planning, funding, scheduling, and induction. That

information should include visibility of unserviceable assets, repair part shortages, demand forecasts for reparable components, and where considered useful, visibility of actual demands and usage of these components.

C4.2.1.4. The DoD Components shall establish processes that position or deliver required repair parts at using maintenance facilities in sufficient time to preclude any delay in maintenance production processes whenever possible.

C4.2.2. Procedures

C4.2.2.1. To ensure best value repair, materiel managers should coordinate their repair requirements with maintenance facilities and maintenance facilities should coordinate their repair parts requirements with parts suppliers, starting with their supporting retail inventory managers.

C4.2.2.1.1. In communicating repair orders to maintenance facilities, materiel managers shall transmit repair quantities based on the latest information on customer requirements.

C4.2.2.1.1.1. Materiel managers should work with maintenance schedulers to ensure that, whenever possible, induction quantities against a repair order are not only set to maximize maintenance productivity, but also set to provide for a sufficient flow of serviceable assets to meet demand and readiness requirements while, at the same time, providing for the flexibility to respond to variable requirements, priorities, and shorter required dates.

C4.2.2.1.1.2. Materiel managers shall also communicate any urgently needed requirements to maintenance facilities to ensure that those requirements receive the proper priority processing.

C4.2.2.1.2. In sourcing repair parts support for depot maintenance facilities, materiel managers may establish specific commercial support agreements or partnerships consistent with paragraph C3.2.2., above. They may establish special internal demand and supply planning and delivery processes tailored to minimize depot wait time for repair parts. To facilitate those actions, repair parts requirements based on depot maintenance and production schedules should be developed and communicated to the appropriate sources of supply .

C4.2.2.2. To identify unique items with unusually high failure and repair rates (i.e., "bad actors"), the DoD Components may use procedures that track items entering repair, as provided for in paragraph C5.7.3., below.

C4.2.2.3. Policies and procedures addressing materiel management and depot maintenance of non-consumable items used by multiple Military Services is in joint issuance AMC-R 700-99/NAVSUPINST 4790.7/AFMCR 400.21/MCO P4410.22C.⁵

C4.3. BUYING FROM SUPPLIERS

C4.3.1. Requirements

C4.3.1.1. The DoD Components shall buy in quantities that originate from demand and supply planning and/or from unfilled customer requirements.

C4.3.1.2. The DoD Components shall ensure that:

C4.3.1.2.1. The buy process supports sourcing buys prior to the actual buy action whenever possible; consolidating repetitive buy actions; and using indefinite delivery contracts, forward pricing agreements, and mobilization-based contracts. As referenced in section C3.1., above, sourcing decisions shall be based on best value competition.

C4.3.1.2.2. The buy process makes quantity discount and holding cost-tradeoff decisions automatically.

C4.3.1.2.3. Buy quantities may be adjusted, based on the latest requirements information, before the material order is actually awarded.

C4.3.1.2.4. Requested delivery dates on for-stock buys should reflect the production lead times used in supply planning unless the vendor is willing to deliver sooner at no cost or expedited delivery is required to satisfy or preclude an unfilled customer requirement. Requested delivery dates from commercial sources that deliver directly to customers should reflect the time-definite delivery standards in Appendix 8 or those in customer performance agreements.

C4.3.1.2.5. Transportation considerations and costs are included in any award decision so that origin or destination acceptance decisions are properly made.

⁵ Joint issuance AMC-R 700-99/NAVSUPINST 4790.7/ AFMCR 400.21/MCO P4410.22C, "Wholesale Inventory Management and Logistics Support of Multi-Service Used Nonconsumable Items," April 27, 1990, can be found at website <http://www.nll.navsup.navy.mil/nll/filedetail.cfm?id=1041>.

C4.3.2. Procedures

C4.3.2.1. As referenced in subparagraph C3.2.1.1.3., above, using tailored and multiple-year purchasing methods (such as IDIQ contracts) is encouraged to get quantity discounts, reduce investment in inventory, reduce ordering time, and adjust to changing demand and asset data.

C4.3.2.2. Quantity price discount ranges shall be routinely requested in solicitations and considered in buy decisions.

C4.3.2.3. Computed EOQ shall be overridden as a target order quantity only when specific documented analysis supports an alternative quantity as more cost effective. Using an order quantity floor other than that prescribed in subparagraph C2.6.3.2.2.2., above, is prohibited.

C4.3.2.4. Analytical and audit support tools shall be developed to aid in considering quantity and/or price and lead-time data with other relevant data so that contract award decisions are based on the best value to the Government.

C4.3.2.5. An evaluation system should be developed to make a source selection and tradeoff delivery of less-critical replenishment requirements when expediting delivery of more important unfilled customer requirements.

C4.3.2.6. To ensure proper origin or destination acceptance decisions and adequate inclusion of transportation clauses in procurement contracts, transportation planners should be included in the contracting process.

C4.4. CLS AND DVD INTERFACES

C4.4.1. Requirements

C4.4.1.1. The DoD Components shall ensure that their logistics processes supports management and integration of CLS (including, but not limited to, performance-based contracts supporting a PBL strategy), planned DVD support, and contingency contracting. That management and integration should include:

C4.4.1.1.1. Private-sector vendors are linked to their DoD customers through direct access to DoD databases (consistent with operational security guidelines and policies) and/or through commercial electronic communication capabilities.

C4.4.1.1.2. Planned DVD programs are supported with viable, long-term contracting vehicles established through best value competition or through a sole source determination. The contracting process for those programs should be transparent to logistics customers.

C4.4.1.1.3. Customer orders for commercially provided logistics materiel and/or services should be transmitted directly to the selected source of support without manual intervention and are provided concurrently to other requiring activities. Cases where customer orders may first go to the IMM for subsequent transmittal to the commercial source include:

C4.4.1.1.3.1. The commercial source is unable to receive orders directly.

C4.4.1.1.3.2. The nature of the item requires that all orders be reviewed prior to being filled.

C4.4.1.2. The DoD Components should track performance-based metrics and/or customer wait time metrics associated with CLS and DVD activities to ensure that customer requirements are being met.

C4.4.2. Procedures

C4.4.2.1. The DoD Components should develop the capability to separately identify costs of vendor support programs in DoD working capital, procurement, and operations and maintenance (O&M) budgets for appropriate categories (e.g., by weapon and equipment, commodity, or organization).

C4.4.2.2. The DoD Components should provide visibility to private-sector providers to support direct vendor delivery, prime vendor, and integrated supplier arrangements. The automated sharing of demand, asset, and other management information with vendors should enable just-in-time links between customers and vendors. Contractor asset visibility may encompass visibility of DoD-held inventories, customer requirements, organic in-process production quantities, BOM requirements, organic intransit asset visibility, payments, and related Government data.

C4.5. SETS, KITS, AND OUTFITS

C4.5.1. Requirements

C4.5.1.1. The DoD Components shall ensure adequate levels of sets, kits, outfits, and component items based on demand planning. Kit assembly instructions shall be given to applicable activities to ensure timely replenishment of stock levels, consistent with the availability of component items.

C4.5.1.2. Before disposing of sets, kits, or outfits, the wholesale item manager shall review the requirements and potential usefulness of all component items. Any item that is identified as "excess" or "potential excess" must be reported or offered to other DoD wholesale managers that stock, store, and issue the item. The item manager directing reshipment, disassembly, or disposal shall coordinate and issue disposition instructions for excess sets, kits, outfits, and components items.

C4.5.1.3. Sets, kits, and outfits containing shelf-life items are subject to the guidance in DoD 4140.27-M (reference (f)).

C4.5.2. Procedures

C4.5.2.1. Preparing, processing, and distributing documentation for the systematic and timely reutilization or disposal of excess sets, kits, outfits, and component items shall be according to standard DoD, Military Department, and DLA detailed procedures.

C4.5.2.2. Subassemblies should be built at the highest generic level possible before they are needed. Pre-built subassemblies can minimize the time necessary for final assembly of sets, kits, or outfits in configurations that satisfy customers' requirements.

C4.5.2.3. Accessories should be packaged into standardized units or dimensions to make the assembly of kits, sets, and outfits easier and more flexible.

C5. CHAPTER 5

DELIVER

C5.1. END-TO-END DISTRIBUTION

C5.1.1. Requirements

C5.1.1.1. The DoD Components shall operate an integrated, synchronized, end-to-end distribution system to meet customer requirements for information and materiel. That system shall be comprised of requisitioning channels, distribution depots, and other storage locations, transportation channels, tracking systems, and other activities involved with the delivery, sale, or disposal of materiel.

C5.1.1.2. The DoD Components shall deliver responsive, consistent, and reliable support using best value providers and processes. They shall also use the same support and value criteria to manage:

C5.1.1.2.1. The positioning, requisitioning, and issuing of stock, including lateral redistribution and the use of excess assets as an alternate source of supply.

C5.1.1.2.2. Operations at storage activities, that is, wholesale distribution depots and retail storage sites, including item accountability.

C5.1.1.2.3. Asset visibility of intransit stocks.

C5.1.1.2.4. The handling of hazardous materials.

C5.1.1.2.5. The retrograde of materiel back to the national level and disposal.

C5.1.1.3. In contracting for commercial logistics support, the DoD Components shall ensure that contracted services are consistent and compatible, to the extent required, with the order, warehouse, transportation, and visibility activities within the DoD end-to-end distribution system.

C5.1.2. Procedures

C5.1.2.1. The DUSD(L&MR) is responsible for establishing guidance to synchronize distribution, with the Military Services, the DLA, and the United States Transportation Command (USTRANSCOM).

C5.1.2.2. The DLA is responsible for requirements and procedures associated with distribution depots not otherwise addressed in this Regulation.

C5.1.2.3. Part II of the Defense Transportation Regulation (reference (q)) addresses procedures and assigns responsibilities for performing traffic management functions initiated or sponsored by DoD activities, to include the transportation and movement of materiel.

C5.1.2.4. The requirements and procedures for the delivery activities identified in subparagraph C5.1.1.2., above, are addressed in the below sections of Chapter 5.

C5.2. STOCK POSITIONING

C5.2.1. General

C5.2.1.1. Requirements

C5.2.1.1.1. The DoD Components shall collaborate on stock positioning decisions to ensure that the right inventory is at the right locations to meet customer requirements by making best value decisions on where to position stocks.

C5.2.1.1.2. To the maximum extent possible, those decisions shall satisfy established performance agreements with weapon system program managers and/or end use customers, while minimizing cost and logistics footprint.

C5.2.1.2. Procedures

C5.2.1.2.1. The DoD Components shall develop stock distribution solutions that optimize stock positioning and movement to meet customer requirements. Customer requirements may be in the form of system availability goals for weapon system stocks or customer response time goals for non-weapon system stocks. Customer response time goals may be substituted for system availability goals if no current capability exists to position weapon system stocks based on system availability.

C5.2.1.2.2. For items totally stocked within the DoD supply system, stock positioning decisions should consider trade-offs between stockage at wholesale distribution depots and retail storage activities where possible.

C5.2.2. Wholesale Stock Positioning

C5.2.2.1. Requirements

C5.2.2.1.1. Stocked items shall be positioned to maximize customer responsiveness while minimizing the total stockage, distribution, and transportation costs. Procured items shall be shipped from commercial sources to the DoD geographic distribution depot that provides the best value.

C5.2.2.1.1.1. Items shall be positioned to maximize support of approved mobilization and emergency war plans.

C5.2.2.1.1.2. To the maximum extent possible, stocked items should be positioned so a given customer is supported from the minimum number of wholesale distribution depots and/or other activities. Typically, wholesale stocks shall be stored at DoD distribution depot locations, but may be stored at commercial activities or DoD retail storage activities when such storage represents the best value to the Department of Defense or when it is required for repair or to satisfy special customer requirements.

C5.2.2.1.1.3. Items shall be positioned to minimize the total inbound and outbound transportation costs, unnecessary long-distance shipments, cross-hauling, and circuitous routing, and to maximize shipment consolidation and the efficient use of transportation resources.

C5.2.2.1.2. When selecting a specific distribution depot(s) for an item of supply, consideration shall be given to the following item-related factors to assess total stockage, distribution, and transportation costs:

C5.2.2.1.2.1. Item characteristics designating an item as a controlled inventory item, shelf-life item, hazardous item, or an item requiring special maintenance and/or inspection requirements, to ensure that adequate security, safety, storage environments, technical expertise, and test equipment exist at the candidate distribution depot(s).

C5.2.2.1.2.2. Projected customer demand patterns, missions, consolidations, and transportation hubs.

C5.2.2.1.2.3. The diversity, locations, volumes, and stability of supply sources for an item including new item contract sources, and organic and contract repair sources.

C5.2.2.1.3. For worldwide distribution of assets, full consideration should be given to DLA Strategic Distribution Platforms, which are designed to integrate stock positioning and transportation to drive down customer wait time and cost while improving the quality and reliability of service.

C5.2.2.1.4. The positioning of item stocks shall be reassessed, at a minimum, once every 12 months. Changes in mobilization plans, missions, weapon systems, deployments, items characteristics, customer demand patterns, and/or sources of supply may require more frequent assessments.

C5.2.2.2. Procedures

C5.2.2.2.1. The item managers shall maintain individual item source and customer demand information and an analytical capability (e.g., a model or mathematical algorithm) to aid in making best value stock positioning decisions.

C5.2.2.2.2. The DLA shall collaborate with the ICPs on an overall stock positioning concept plan. The plan shall be developed based on the guidance in subparagraph C4.2.1.3., above, and shall identify the preferred distribution sites by class of materiel.

C5.2.2.2.3. The item manager shall, in coordination with the DLA, identify the distribution sites and the stockage level for each site. Stockage of the item shall be based on the guidance in subparagraph C5.2.1.2.2., above, and, to the maximum extent possible, within the overall stock positioning concept plan negotiated with the DLA. The ICP shall document the rationale for stockage decisions that are not consistent with the overall stock positioning concept plan.

C5.2.2.2.4. The DLA shall, to the maximum extent possible, provide storage capacity, according to the ICP selected sites. When the ICP site selection does not fall within DLA's stock positioning concept plan, the DLA and the ICP shall negotiate to arrive at a final selection.

C5.2.2.2.5. When the decision is made to change the stockage location(s) of the item, the materiel at the original location(s) shall be removed by attrition and new deliveries of the item shall be to the new stockage location(s). Similarly, asset balancing between distribution depot locations shall be achieved by driving down stocks through attrition and raising stock levels with new deliveries. To minimize the time assets are unavailable for issue, redistribution to change/balance stock locations shall be the course of last resort and used only when economically justified.

C5.2.3. Retail Stock Positioning

C5.2.3.1. Requirements

C5.2.3.1.1. The DoD Components shall stock items at retail intermediate and consumer levels of supply in a manner that supports the mission requirements of the unit or units being supplied by those levels of supply while minimizing inventory cost and the logistics footprint.

C5.2.3.1.2. The level of stock positioned at retail supply activity shall depend on the reason for stockage (see Appendix 3) and associated computational methodology. (See subparagraph C3.2.5.2.2., above.)

C5.2.3.2. Procedures

C5.2.3.2.1. The DoD Components shall use stockage criteria that considers the reasons for stockage and is tailored to unit mission requirements.

C5.2.3.2.2. Besides cost and customer requirements, the criteria should consider the response time from the next higher source of supply, whether that is a wholesale distribution depot, a commercial vendor, or another retail-level of supply.

C5.3. REQUISITIONING

C5.3.1. Requirements

C5.3.1.1. Requisition Initiation

C5.3.1.1.1. Each Military Service and Defense Agency shall assign DoD Activity Address Codes (DoDAACs) to activities under their respective jurisdictional control and shall authenticate those DoDAACs that are authorized to requisition materiel from the DoD supply system. By agreement with the GSA, Federal Civilian Agencies may requisition materiel by establishing an approved DoDAAC. Section C5.11., below, provides requirements and procedures for when commercial activities that enter into materiel and service contracts with the Department of Defense may obtain DoDAACs and requisition DoD materiel. A foreign country may requisition materiel under a security assistance program using a Military Assistance Program Address Code (MAPAC) assigned by a Military Service.

C5.3.1.1.2. Retail supply activities authorized to requisition directly from the wholesale system shall have visibility of the wholesale inventory, including assets in the DRMS and those assets available from commercial sources of supply whenever possible. To fill critical shortages outside of normal requisitioning channels, retail supply activities shall have visibility of assets and requirements of other retail supply activities.

C5.3.1.1.2.1. To find potential supply sources for critical shortages, retail supply activities shall have access to assets and requirements information of other retail supply activities within the same Military Service.

C5.3.1.1.2.2. As a DoD Component prerogative, a DoD Component may provide full and complete retail-to-retail access to the other DoD Components or limit access to "read-only" visibility.

C5.3.1.1.3. Establishing the frequency of submitting requisitions and the order quantities is the prerogative of the requisitioner.

C5.3.1.1.4. Requisitions shall be submitted electronically. The communication of requisitions and related documents by other means is authorized only in exceptional circumstances.

C5.3.1.1.5. Identifying a requisition as a recurring demand, a non-recurring demand, a non-recurring demand for SPRs, a commissary resale demand, or a no-demand is the responsibility of the requisitioner.

C5.3.1.1.5.1. A recurring demand is a request to satisfy a materiel requirement for consumption or stock replenishment that is anticipated to occur periodically or to occur randomly with a reasonable probability of recurrence.

C5.3.1.1.5.2. A non-recurring demand is a request to satisfy a materiel requirement known to be a one-time occurrence, such as requests to provide initial stockage allowances, to meet planned program requirements, or to satisfy one-time maintenance requirements. Other examples of non-recurring demands include increases in the range of items authorized by tables of allowance or increases in the depth of stock that an activity is authorized to hold.

C5.3.1.1.5.3. A non-recurring demand for SPRs is a demand for which a requirement has already been recorded in the supply system via a submitted SPR or similar submission. Such demands shall be classified as program-based to preclude their inclusion in subsequent requirements computations.

C5.3.1.1.5.4. A no-demand requisition is a request for materiel for which the demand has already been recorded in the supply system and other demand categories are not applicable. No demand shall be assigned for initial fill of consumable item requirements for pre-positioned war reserve materiel stock and for other specific circumstances requiring resubmission of a requirement on a new requisition (e.g., replacement for materiel damaged or substitute for materiel requisitioned, but delayed).

C5.3.1.2. Modification Vice Additional Submissions. When required, requisitioners should modify previously submitted requisitions for which the requisitioned material has not yet been delivered rather than submit additional requisitions.

C5.3.1.3. Requisition Cancellation. Requisition cancellation requests shall be submitted when there is no longer a requirement for the requisitioned item, regardless of line item dollar value or supply status received. Cancellation requests for which materiel release orders have not been submitted to depot and/or storage and/or for which purchase requests have not been submitted to procurement activities shall be affected immediately, regardless of dollar value or quantity. Supply sources and storage activities are responsible for exercising the fullest practical resourcefulness in preventing the issue and shipment of unwanted materiel for which materiel release orders and/or purchase requests have been submitted to storage activities. Similarly, procurement activities are responsible for exercising the greatest practical resourcefulness in preventing the purchase and/or shipment of unwanted materiel for which purchase requests have been submitted.

C5.3.1.4. Requisition Priority

C5.3.1.4.1. Customers of the supply system shall determine and communicate the relative precedence of their individual materiel requirements by entering on their requisitions:

C5.3.1.4.1.1. Priority designators that are determined by the Force or Activity Designator (F/AD) assigned to the customer and the customer's applicable Urgency of Need Designator (UND).

C5.3.1.4.1.2. Required delivery dates (RDDs).

C5.3.1.4.1.3. Approved Office of the Secretary of Defense (OSD) or Chairman of the Joint Chiefs of Staff project codes.

C5.3.1.4.2. Appendix 9 specifies the criteria and responsibilities for F/AD assignment and control. DoD 4000.25-1-M (reference (r)) specifies the criteria, responsibilities, controls, and methodology for determining the appropriate UND and priority designator, as well as RDD entries and assignment and/or use of OSD or Chairman of the Joint Chiefs of Staff project codes.

C5.3.1.4.2.1. Normally, higher priorities are associated with greater urgency of need. However, where inventory cost savings are demonstrated to be greater than the additional transportation costs, the Military Services may designate transportation priorities that expedite routine replenishment requisitions by entering a RDD with a specific Julian date and shall remunerate the managing IMM accordingly through an inter-Service support agreement or other appropriate medium.

C5.3.1.4.2.2. Priority designators shall not be abused to expedite the transportation of routine replenishment shipments.

C5.3.1.4.3. The DoD Components shall ensure that all sources of supply (e.g., wholesale stocks, excess stocks, retail stocks, multiple producers, vendors, production lines, on-demand manufacturing, accelerated repair, and materiel redistribution) are checked and, to the extent possible, evaluated automatically to satisfy high-priority customer demands.

C5.3.1.4.4. Supply sources shall process all requisitions under the appropriate time standards described in section C8.8., below, according to the required delivery date, required delivery period, the OSD and/or the Chairman of the Joint Chiefs of Staff or Service and/or Agency project requirements, commodity-unique rules, or established wartime and/or contingency materiel allocation procedures that are in effect. Supply sources shall consider the total cost of processing requisitions (to include inventory, distribution, and transportation management considerations) in their decision-making processes.

C5.3.1.4.5. A wartime and/or contingency materiel allocation process shall be established to determine requisition processing and materiel release and shipment precedence in the DoD supply and transportation system. The wartime and/or contingency materiel allocation process shall be compatible with all other processing rules of the system. The system shall provide the capability to activate additional materiel allocation rules into the automated processes of the system to ensure the balanced flow of required materiel to units involved in wartime or contingency operations. The system shall be used to provide support to the Joint Materiel Priorities and Allocation Board in the allocation of scarce materiel during wartime or

contingency operations. The wartime and/or contingency materiel allocation process shall be activated at the request of the Chairman of the Joint Chiefs of Staff.

C5.3.1.4.6. Only war reserve stocks that are acquired with funds limited to that use by statute shall be protected. However, if protected war reserve stocks are used to satisfy peacetime requirements, the stocks may be replaced with war reserve reinvestment funds. War reserve stocks acquired through stratification shall not be replaced if consumed.

C5.3.1.4.7. When a DoD Component executes a contract that allows for a commercial contractor to requisition materiel from the DoD distribution system, the DoD contracting officer shall advise the contractor of the priority designators to be shown in such contractor-prepared requisitions. The direction to the contractor should take cognizance of the F/AD of the national priority program, force, or activity for which the contract is executed, and potential urgencies of need.

C5.3.1.5. Pipeline Status. Supply sources shall provide timely status information for each requisition, follow-up, reinstated requisition, requisition modifier document, redistribution order, passing order, referral order, and materiel release order processed.

C5.3.1.5.1. The status of an order shall be visible from the time of requisition to when the customer receives the materiel.

C5.3.1.5.2. Order tracking and status shall be simplified through the use of a standard single-customer order identification number.

C5.3.1.5.3. To simplify order tracking once one or more shipments are made to satisfy a requisition, all shipments, regardless of origin or destination, shall be assigned a shipment transportation control number (TCN) that is linked to the requisition.

C5.3.1.6. Receipt Acknowledgment. Receiving activities shall acknowledge receiving all shipments of requisitioned materiel.

C5.3.1.7. Management of Requisitioning Procedures. Management of requisitioning procedures shall be accomplished under the DLMS. (See section C8.6.)

C5.3.1.8. Presidential Determination. Under 22 U.S.C. 2318 (reference (s)), the President is authorized to draw down articles and services from any Agency of the U.S. Government for the following:

C5.3.1.8.1. International narcotics control assistance.

C5.3.1.8.2. United Nations peacekeeping efforts according to 22 U.S.C. 287 (reference (s)).

C5.3.1.8.3. International disaster assistance.

C5.3.1.8.4. Antiterrorism assistance.

C5.3.1.8.5. Nonproliferation assistance.

C5.3.1.8.6. Migration and refugee assistance.

C5.3.1.8.7. Prisoner of war (POW) and/or missing in action (MIA) efforts in Vietnam, Cambodia, and Laos.

C5.3.2. Procedures

C5.3.2.1. The detailed procedures for establishing DoDAACs, including data elements, codes, formats, and instructions, are in DoD 4000.25-6-M, Parts I through III (references (t) through (v)). The procedures for MAPACs are in DoD 4000-25-8-M (reference (w)).

C5.3.2.2. The detailed procedures for requisitioning are in DoD 4000.25-1-M (reference (r)). Reference (r) has the codes (including the recurring and non-recurring demand codes), formats, forms, time standards, and instructions for the submission and processing of requisitions, modifications, follow-ups, and cancellations.

C5.3.2.3. The detailed procedures for acknowledging receipt of materiel, including detailed guidance on preparing and processing materiel receipt acknowledgment documents, are in DoD 4000.25-2-M (reference (g)).

C5.3.2.4. To reduce customer wait time and minimize the layering of inventory in support of specific consumer requirements (replenishment or end-use), requisitions shall be processed directly to the supporting intermediate or wholesale echelon, as applicable. Normally, no more than one intermediate supply activity should be included in the requisitioning channel for a consumer.

C5.3.2.5. The procedures for Presidential draw down are as follows:

C5.3.2.5.1. The DoD Components, when directed to provide material and/or services, shall draw down these assets and/or services from existing DoD stocks and/or resources and shall absorb the cost associated with the material, as well as, staging and transportation costs, and when necessary, rehabilitation charges.

C5.3.2.5.2. The DoD Components shall be responsible for logistical and financial reporting with guidance from the Defense Security Cooperation Agency (DSCA).

C5.4. MATERIEL ISSUE PROCESSING

C5.4.1. Requirements

C5.4.1.1. All issues of materiel from storage activities, including issues from receipts, shall be confirmed to the total item property record as rapidly as is technically possible through electronic communications. Using other than electronic means to communicate issue transactions and related documents is authorized only in exceptional circumstances. Using machine-readable devices (e.g., smart cards, magstripes, and bar-coded personnel IDs) improves the issue process by facilitating detailed audit trails, validating customer authorizations, eliminating document control functions, and enabling a paperless environment.

C5.4.1.2. The daily issue workload shall be organized and scheduled to maximize the efficiency of the issuing, packing, and shipping processes. To that end, storage activities should:

C5.4.1.2.1. Ensure that storage location assignments use zoned locations, frequency of access criteria, special handling, and security requirements to optimize physical storage and picking.

C5.4.1.2.2. Seek to enhance, where appropriate, automatic material handling capabilities at all storage locations to ensure timely, safe, and secure movement and storage of material.

C5.4.1.2.3. Have the capability to allocate scarce material and distribution resources among competing demands during crises and contingencies.

C5.4.1.3. Normally the oldest materiel in storage should be issued first, except where issue of newer stocks is justified by special requirements. Exceptions to the first-in-first-out policy for shelf-life materiel are found in paragraph 6-4 of DoD 4140.27-M (reference (f)).

C5.4.1.4. When an insufficient quantity of materiel is in stock to satisfy a directed issue, the storage activity shall issue what it has on hand and transmit a materiel denial for the balance of the quantity to the IMM.

C5.4.1.5. Although each issue should be treated as a separate action, issuing, packing, and shipping processes may consolidate issues to individual customers or to customer areas to meet required delivery times at best value.

C5.4.2. Procedures

C5.4.2.1. The DLA and the Military Services shall publish the detailed procedures for efficient and effective issuing of materiel for the storage activities they manage.

C5.4.2.2. The detailed procedures for recording and processing ICP issue transactions are in Chapter 3 of DoD 4000.25-2-M (reference (g)) and DoD 4000.25-M (reference (x)).

C5.5. LATERAL REDISTRIBUTION OF ASSETS

C5.5.1. Requirements

C5.5.1.1. The DoD Components may fill requests for materiel or requisitions through lateral redistribution of assets. Redistribution methodologies and procedures apply to all materiel assets, including fuel and medical, regardless of funding source. Except for ammunition, principal items and equipment are excluded. Redistribution (cross leveling) requirements and procedures for ammunition are in section C9.3., below.

C5.5.1.2. Redistribution within a Military Service may occur before wholesale level requisitioning. Reimbursement for such intra-Service lateral redistribution is at the Military Service's option. However, the associated IMM shall manage and control inter-Service lateral redistribution.

C5.5.1.3. Inter-Service redistribution should not occur before wholesale level requisitioning, except within theater at the direction of the Commander of the Combatant Commands. When wholesale assets are not available to satisfy the requisition, the IMM shall seek to satisfy the requisition through alternative means, including the DoD lateral redistribution process as prescribed in paragraph C5.5.2., below.

C5.5.1.4. Lateral redistribution shall balance mission requirements with cost effectiveness. Wholesale level activities should direct retail redistribution versus wholesale issue when the total cost of such action is lower or when the wholesale level does not have stock available to meet a requisition's required response time and the retail level does and can meet the required response time. If no retail activity can meet the required response time, redistribution may still be used if a retail activity can deliver sooner than the wholesale level.

C5.5.1.5. Activities that are mobile, deployed in mission posture, or are in field training exercises and assets aboard ship are exempt from automated redistribution, but the assets should be available on a case-by-case basis to manually fill critical shortages.

C5.5.2. Procedures

C5.5.2.1. An IMM shall satisfy a requisition through lateral redistribution of retail assets with these provisions and provisions of DoD 4000.25-1-M (reference (r)):

C5.5.2.1.1. For purposes of automated lateral redistribution, typically assets stored within DoD intermediate and consumer retail levels of supply down to and including these activities are applicable: the Army - to Authorized Stockage List; the Navy - to retail ashore; the Air Force - to base supply; and the Marines - to base supply. On-hand inventories of these assets shall be reported on an automated basis, either via transactions to the IMM or via update to web/data base accessible to the IMM.

C5.5.2.1.1.1. Assets held by working-capital-funded repair activities, such as depot maintenance activities and shipyards, are also considered retail-level assets for lateral redistribution. Those activities shall report on-hand inventories, but in some cases may not be subject to the redistribution of those assets.

C5.5.2.1.1.2. At their own discretion, the DoD Components may include in their systems complementing policies and procedures to extend the visibility and redistribution of their assets to additional and/or lower levels of supply than those referenced in subparagraph C5.5.2.1.1., above.

C5.5.2.1.1.3. Detailed procedures for transactional reporting of on-hand retail-level assets are in DoD 4000.25-2-M (reference (g)).

C5.5.2.1.1.4. Detailed procedures and the transactions used in the referral, confirmation, and shipment of retail assets via the lateral redistribution process are in DoD 4000.25-1-M (reference (r)).

C5.5.2.1.1.5. Detailed procedures and transactions used in the billing process for lateral redistribution are in DoD 4000.25-7-M (reference (y)).

C5.5.2.1.2. Assets above an item's requisitioning objective are available for satisfying requisitions, regardless of priority, including those at working-capital-funded repair activities.

C5.5.2.1.3. Assets below the requisitioning objective shall be made available for high-priority requisitions, as dictated by the inter-DoD Component business rules for lateral redistribution. At a minimum, those business rules should address requisitions that are issue priority group I with a not mission-capable supply code or with a Chairman of the Joint Chiefs of Staff project code.

C5.5.2.2. When making a lateral redistribution through the DoD lateral redistribution process, a retail supply activity shall comply with time standards established in Appendix 8 and shall provide status information to the wholesaler. The DoD Components shall ensure that competing visibility and accessibility systems do not attempt to issue the same materiel or materiel that has already been issued.

C5.5.2.3. Billing procedures associated with the DoD lateral redistribution process shall ensure that the issuing activity is reimbursed for both the standard price of the materiel and a percentage of the standard price for packaging and handling costs associated with a lateral redistribution. When the IMM requests materiel to offset a procurement, the IMM shall ensure that the issuing activity is reimbursed for both the acquisition price of the materiel and a percentage of the acquisition price for associated packaging and handling costs. Transportation costs shall be at the ICP's actual cost recovery rate of acquisition price by commodity. The IMM shall receive credit for sale in those types of transactions.

C5.6. DISTRIBUTION OPERATIONS

C5.6.1. Requirements

C5.6.1.1. To the maximum extent possible, work assignments within a storage activity shall be divided to maintain the security of materiel and the integrity of the records. For example, with the exception of "issue from receiving" operations no individual shall both perform issue and receipt functions and/or file maintenance actions for both functions.

C5.6.1.2. Storage activity resources shall be optimally employed to provide the required levels of performance at the minimum cost.

C5.6.1.3. Storage activity performance goals shall be established to achieve continuous improvement, and a system for monitoring performance and workload shall be established and maintained.

C5.6.1.4. Automated storage and retrieval systems, storage aids, materiel handling equipment, and AIT and other labor saving devices should be used to increase productivity and to reduce the need for hard copy documentation and manual data entry, the opportunities for human error, and the recurring cost of operations.

C5.6.1.5. Storage activities shall position and issue materiel from storage locations in a manner that:

C5.6.1.5.1. Provides for efficient issuing, packing, and shipping processes.

C5.6.1.5.2. Obtains the best use of materiel handling and storage equipment.

C5.6.1.5.3. Keeps the number of warehouses to a minimum.

C5.6.1.5.4. Obtains the best use of storage space in warehouses that are used.

C5.6.1.5.5. Keeps the rewarehousing of materiel to a minimum.

C5.6.1.6. A workload planning and scheduling system shall be employed to accomplish all the storage activity workload as efficiently as possible. Whenever possible, that system should ensure that other functions, such as inventory and quality inspections, are conducted in the normal course of accomplishing other primary functions, such as picking and stowing.

C5.6.1.7. Storage activities shall use efficient and effective materiel control systems, including AIT, to track materiel from the point it enters their custody until it leaves their custody.

C5.6.1.8. Storage activities shall be evaluated on the timely and accurate handling of issues and receipts. Performance matrices shall allow for separate processing standards based on the type of issue (material release, redistribution and/or disposal order); and source of receipt (e.g., new procurement, returns and/or stock redistribution).

C5.6.1.9. Storage activities shall systematically review material in storage to identify and report suspended material conditions to the applicable IMM to provide for timely identification and processing of unneeded stocks to disposal.

C5.6.1.10. A safety program shall be established and executed to ensure that personnel and property are protected against accidents and the inherent hazards of a warehousing environment.

C5.6.1.11. A comprehensive training program shall be established and executed to improve employee productivity, job satisfaction, health, and safety.

C5.6.1.12. When distribution functions currently performed organically are contracted out, the statement of work should consider the aforementioned guidance and capabilities.

C5.6.2. Procedures. The DLA and Military Services shall publish the procedures for efficient and effective distribution operations that they manage.

C5.7. ITEM ACCOUNTABILITY, CONTROL, AND STEWARDSHIP

C5.7.1. Accountability

C5.7.1.1. Requirements

C5.7.1.1.1. A single item-inventory record shall be shared to provide materiel asset information. Duplicative records maintained by ICPs and storage activities shall be consolidated into one inventory record.

C5.7.1.1.2. The storage activity is responsible for the content, changes, and accuracy of the inventory held under its control.

C5.7.1.1.2.1. The record or record set shall identify the quantity, condition, and value of the item assets for each organizational entity having physical custody of those assets.

C5.7.1.1.2.2. The IMM total item property record shall, as a minimum, include materiel that is due in, in-transit, in organic wholesale repair facilities, in a contractor's custody, on loan, on-hand in wholesale storage activities, reported on-hand at retail activities, and for reported assets in the custody of users.

C5.7.1.1.3. The property accountability responsibility for segments of the total item property record may be delegated to, but not shared by, one or more organizational entities.

C5.7.1.1.4. Storage activities shall be accountable for the accuracy of that portion of the total item property record showing the quantitative balance in their custody. The application of AIT may improve the timeliness, accuracy, and efficiency of inventories by enabling use of machine-readable materiel identification and supporting serialized item tracking.

C5.7.1.1.4.1. Storage activities that have physical custody of materiel are responsible for caring and safeguarding it.

C5.7.1.1.4.2. Storage activities shall conduct physical inventories; initiate and conduct discrepancy research; and prepare supply discrepancy reports; resolve discrepancies, investigating, and assessing liability for loss, damage, and destruction of Government property; and applicable actions necessary to ensure that the physical on-hand quantity and the total item property record quantity agree.

C5.7.1.1.4.3. The IMMs are responsible for initiating and directing the conduct of physical inventories; discrepancy research and reports; resolving discrepancies, investigating, and assessing liability for loss, damage, and destruction of U.S. Government property; and taking applicable actions necessary to ensure that the physical on-hand quantity and the total item property record quantity are in agreement for all DoD materiel that is not in the physical custody of DoD activities.

C5.7.1.2. Procedures

C5.7.1.2.1. Each DoD Component shall ensure that information management systems software adheres to the policies in this Regulation.

C5.7.1.2.2. Each DoD Component shall ensure that its DoD Component and activity level operating procedures are current and comply with the guiding policies in this Regulation and the detailed procedures referenced by this Regulation. Each DoD Component shall conduct internal reviews to ensure execution compliance, according to DoD Directive 5010.38 (reference (z)).

C5.7.1.2.3. The detailed procedures for maintaining supply record accountability are in DoD 4000.25-2-M and DoD 4000.25-M (references (g) and (x)).

C5.7.1.2.4. The detailed procedures for investigating and assessing liability for loss, damage, and destruction of Government property are in Chapter 7 of Volume 12 of DoD 7000.14-R (reference (h)).

C5.7.2. Audit Trail Control

C5.7.2.1. Requirement. Transaction histories shall be maintained providing a complete audit trail of all transactions affecting the total item property record for a minimum of 2 years.

C5.7.2.2. Procedures

C5.7.2.2.1. The transaction history audit trail shall be composed of the information system transaction record and, if one is produced, the source document that prompted the information system transaction.

C5.7.2.2.2. If a source document is produced, source data automation techniques should be used to the maximum extent to capture the required information from it and to keep a retrievable image of the document.

C5.7.2.2.3. When both exist, the information system transactions and source documents and/or images shall be indexed in such a way that they are tied together for retrieval.

C5.7.3. Unique Item Tracking (UIT)

C5.7.3.1. Requirement. Standard UIT programs shall be established within the Department of Defense for selected items to maintain visibility of each uniquely identified asset for the primary purpose of inventory control and/or engineering analysis. Security, accountability, safety, maintenance, operational readiness, warranty applicability, and other areas that may benefit from the tracking process shall be subsets of the inventory control or engineering analysis functions.

C5.7.3.2. Procedures

C5.7.3.2.1. This section:

C5.7.3.2.1.1. Applies to all DoD Components and to the DoD Unique Item Tracking Committee (UITC) whose Charter is at Appendix 10.

C5.7.3.2.1.2. Mandates minimum operational requirements for approval and operation of DoD UIT programs.

C5.7.3.2.1.3. Establishes and charters the DoD UITC for continuous program improvement, identification of inter-DoD Component problems, and formulation of workable solutions.

C5.7.3.2.1.4. Establishes the authority for the UIT program procedures, transactions, and conventions of the DLMS, administered under section C8.6., below, which ensures the uniform execution of DoD UIT guidance.

C5.7.3.2.2. UIT data shall be exchanged using DLMS transactions.

C5.7.3.2.3. All UIT programs shall include provisions for data introduction and tracking using AIT. Business processes that include UIT capabilities shall use AIT devices capable of reading standard marking symbols from product markings, unit/exterior packaging markings, or accompanying documentation. Information recorded in AIT devices will be used to update automated information systems.

C5.7.3.2.4. DoD-level UIT programs shall be established when inter-DoD Component, or inter-Federal Agency/DoD visibility of selected items is required. When intra-DoD Component visibility of items is required, the DoD Component shall establish programs as deemed necessary. These local-level unique item tracking programs do not require reporting to the UITC.

C5.7.3.2.4.1. The DoD Small Arms Serialization Program (DoDSASP) is the recognized DoD UIT program for all small arms, as defined in Chapter 12 of DoD 4000.25-2-M (reference (g)). Security risk Category I non-nuclear missiles and rockets shall be included in the DoDSASP only if the asset and physical custodian are not tracked in the Service internal Supply Class V tracking systems, which will be considered as DoD-level UIT programs.

C5.7.3.2.4.2. The Navy Depot-Level Repairable Program is the recognized inter-DoD Component UIT program for Navy-managed depot-level repairable items.

C5.7.3.2.5. Intra-DoD Component UIT programs shall not impact the operations or logistics systems of the other DoD Components.

C5.7.3.2.6. A Unique Item Identifier (UII) shall be assigned to individual assets of an item being controlled or managed under a UIT program. The length of UIIs shall not exceed the capability of supporting commercial AIT devices and systems to support their use.

C5.7.3.2.7. UIT Program Identification and Registration

C5.7.3.2.7.1. Before being approved, all UIT programs shall be subjected to an analysis that clearly shows such tracking is beneficial, cost-effective, and adds to operational readiness.

C5.7.3.2.7.2. All UIT programs shall be documented and submitted to a single point within each DoD Component for review, DoD Component approval, and submission to the DoD UITC for registration as a DoD program when inter-DoD Component visibility is required. DoD-level UIT programs shall be registered with the UITC to obtain a program-unique UIT designator code and to ensure the proper exchange of UIIs between DoD Components. Intra-DoD Component UIT program (i.e., those for which there is no inter-DoD Component exchange) should be registered with the DoD Component UITC representative.

C5.7.3.2.7.3. The DoD UITC shall maintain a record of all DoD-level UIT programs.

C5.7.3.2.7.4. If a DoD-level UIT program is a candidate for discontinuation, the proponent shall document and submit the requirement for discontinuation to a single point within the proponent's DoD Component. No proponent DoD Component may discontinue tracking registered DoD UIT program items until the UITC has reviewed and agreed to the request for discontinuation and the DUSD(L&MR/SCI) has approved the cessation of tracking.

C5.7.3.2.8. UII Assignment and Controls

C5.7.3.2.8.1. An individual asset within a UIT program shall be identified with a UII. UIIs shall be used to uniquely identify an individual asset used

within the Department of Defense, as well as the commercial sector. A UII may be the item's serial number; a combination of the Contractor and Government Entity (CAGE) code, part number, and serial number; the vehicle identification number; etc., as long as no other UIT asset has the same identifier within its NSN or National Item Identification Number.

C5.7.3.2.8.2. UIIs shall be assigned for all assets within the supply system that have been identified as part of a registered UIT program.

C5.7.3.2.8.3. System design efforts shall provide for use of the UII for UIT programs and for the exchange of UIT data using standard logistics transactions. (See section C8.6., below.)

C5.7.3.2.9. The DoD Components shall:

C5.7.3.2.9.1. Ensure logistics systems redesign includes the standardization of policies in this Regulation.

C5.7.3.2.9.2. Assign a central control point within the DoD Component, and subordinate elements as needed, to ensure UIT program implementing procedures and practices conform with the requirements of this section, and to:

C5.7.3.2.9.2.1. Identify assets requiring UIT and document the purpose and scope of the program.

C5.7.3.2.9.2.2. Register DoD Component-approved UIT programs that require inter-DoD Component visibility with the DoD UITS and obtain a program-specific UIT designator.

C5.7.3.2.9.2.3. Maintain a register of all intra-DoD Component programs.

C5.7.3.2.9.2.4. Submit to the DLIS information necessary to record UIT program stock numbers and UIT designators for items in a UIT program.

C5.7.3.2.9.3. Designate primary and alternate representatives to serve on the DoD UITS.

C5.7.3.2.9.4. Establish UIT as an element to be addressed in annual internal management control assessments required by DoD Directive 5010.38 (reference (z)).

C5.7.3.2.9.5. Ensure that training is provided to personnel who perform functions affecting UIT and training courses are updated to teach current DoD policies and procedures.

C5.7.3.2.10. The Director of the Defense Logistics Management Standards Office (DLMSO), shall:

C5.7.3.2.10.1. Ensure that DLMS provides full inter-DoD Component UII tracking capability and that implementation conventions require use of the UII for UIT programs.

C5.7.3.2.10.2. Chair the DoD UITC.

C5.7.3.2.10.3. Staff changes to the DLMS that are recommended by the DoD UITC.

C5.7.3.2.11. The DoD UITC shall monitor DoD UIT programs and recommend conceptual and technological changes to improve such programs, according to the UITC Charter in Appendix 10.

C5.7.4. DoD Small Arms Serialization Program

C5.7.4.1. Requirement. The DoDSASP shall provide special emphasis on, and visibility of, small arms by tracking, reporting, validating, and registering the status of each small arm by serial number and physical custodian.

C5.7.4.2. Procedures

C5.7.4.2.1. This Regulation establishes and charters the DoD Joint Small Arms Coordinating Group (JSACG) for continuous program improvement, identification of inter-DoD Component problems, and the formulation of solutions to those problems. (Appendix 11 is the JSACG Charter.)

C5.7.4.2.2. The DoD Registry shall serve as the core of the DoDSASP and shall be updated by the DoD Components according to the procedures in Chapter 12 of DoD 4000.25-2-M and Chapter 19 of DoD 4000.25-M (references (g) and (x)). Deviations from those requirements, such as for small static inventories, require the concurrence of the JSACG and, if necessary, the approval of the DUSD(L&MR).

C5.7.4.2.3. All small arms, as defined in Chapter 12 of reference (g) and Chapter 19 of reference (x), including those mounted on aircraft, vehicles, and vessels

that are accounted for in unclassified property records, shall be reported to the DoD Registry, according to the procedures in Chapter 12 of reference (g) and Chapter 19 of reference (x). Security Risk Category I non-nuclear missiles and rockets shall only be included in the DoDSASP if the asset and its physical custodian are not recorded in the Service internal Supply Class V tracking systems. To ensure accurate tracking, the serial number of a missile and rocket, in the appropriate tracking system, cannot be changed, but may be modified with a suffix when the unit is in maintenance.

C5.7.4.2.4. The DUSD(L&MR) shall establish policy and oversee the operation of the DoDSASP, including the JSACG.

C5.7.4.2.5. The DoD Components shall establish, control, and fund the automated registration of all small arms and Category 1 missile and rocket UIIs in their inventories, including all small arms transferred outside their inventories, such as those released to the GSA and those released under foreign military sales arrangements. In this regard, the application of AIT may improve the timeliness, accuracy, and efficiency of inventory control by enabling the use of machine-readable materiel identification and supporting serialized item tracking.

C5.7.4.3. The Secretaries of the Military Departments and the Director, DLA, shall:

C5.7.4.3.1. Provide representatives for the JSACG.

C5.7.4.3.2. Provide logistics and IT personnel participation, as required, to support JSACG efforts.

C5.7.4.3.3. Fund travel and administrative costs associated with JSACG reviews and meetings.

C5.7.4.4. The Secretary of the Army shall:

C5.7.4.4.1. Serve as the DoD Executive Agent for the operation and oversight of the DoD Registry.

C5.7.4.4.2. Fund the operation and maintenance of the DoD Small Arms Registry.

C5.7.4.4.3. Identify problems, violations, and deviations that arise during system operations and, as applicable, report them to the program administrator for resolution.

C5.7.4.4.4. Provide the DoD Executive Agents' DoD Central Registry Annual Operating Report to the DoDSASP Administrator. The annual operating report submission should coincide with the annual meeting of the JSACG.

C5.7.4.5. The DLMSO shall:

C5.7.4.5.1. Establish a program administrator to serve as the DoD focal point for the DoDSASP and to chair the JSACG and perform the responsibilities in the JSACG Charter. (See Appendix 11, below.)

C5.7.4.5.2. Ensure interoperability of the DoD Components' DoDSASP procedures and transactional interfaces.

C5.7.4.5.3. Ensure uniform implementation of DoDSASP requirements and procedures by the DoD Components.

C5.7.4.5.4. Provide staffing and administrative support for the Chair, JSACG.

C5.7.4.6. The DoD Small Arms Serialization Program Administrator shall, according to this Regulation, develop and publish procedural guidelines for small arms; coordinate proposed DLMS changes and reconcile problems among the DoD Components.

C5.7.4.7. The DoD DLMS System Administrator shall provide an advisory representative to the JSACG and publish JSACG-recommended changes to Chapter 12 of DoD 4000.25-2-M and Chapter 19 of DoD 4000.25-M (references (g) and (x)).

C5.7.4.8. The JSACG shall recommend policy and devise program enhancements for the small arms serialization program according to the JSACG Charter in Appendix 11.

C5.7.5. Physical Inventory Control

C5.7.5.1. Requirements

C5.7.5.1.1. A Physical Inventory Control Program (PICP) shall be established for DoD supply system materiel (both wholesale and below wholesale) and maintained by each DoD Component to provide for the economical and efficient stewardship of DoD supply system materiel.

C5.7.5.1.2. The DoD PICP shall include physical inventories; location surveys; quality control; research; accuracy and performance goals; workload and/or performance management reporting; and, pending establishment of single shared-asset balances, reconciliation of records.

C5.7.5.1.3. Storage activities shall maintain quantitative balance records by individual storage location. Maintenance of those records shall provide the capability to detect theft or diversion of materiel and find the cause of variances, enabling corrective management action.

C5.7.5.1.4. The DoD Components shall devote resources and select items for physical inventory according to this prioritization:

C5.7.5.1.4.1. Annual random statistical samples that shall support the determination of logistics record accuracy and financial record accuracy.

C5.7.5.1.4.2. Classified items.

C5.7.5.1.4.3. Sensitive and pilferable items.

C5.7.5.1.4.4. Items with known or suspected discrepancies or items requested by the materiel manager or accountable officer.

C5.7.5.1.4.5. All other items that shall be candidates for physical inventory based on a prioritization system or sampling strategy.

C5.7.5.2. Procedures

C5.7.5.2.1. The detailed procedures for the DoD PICP are in DoD 4000.25-2-M and DoD 4000.25-M (references (g) and (x)). The detailed procedures contain the required transaction formats, data element and code definitions, required time frames for actions, control and selection criteria, performance standards, and management data requirements for the conduct of these five major physical inventory control program elements:

C5.7.5.2.1.1. Physical inventory.

C5.7.5.2.1.2. Location audit.

C5.7.5.2.1.3. Research.

C5.7.5.2.1.4. Quality control.

C5.7.5.2.1.5. Management reporting.

C5.7.5.2.2. The detailed procedures specify the minimum DoD-wide standards, controls, and records required to ensure the proper accountability and accuracy of DoD supply system inventories.

C5.7.5.2.3. In addition to the requirements specified in paragraph C5.7.1., above, these requirements apply for the following risk category missiles, rockets, arms, ammunition and explosives:

C5.7.5.2.3.1. The DoD Components having custody or accountability of Category I Non-Nuclear Missiles and Rockets or Category II, III, and IV Arms (includes other sensitive conventional arms in addition to small arms) shall perform the following inventories on those items:

C5.7.5.2.3.1.1. Unit level shall do a 100 percent monthly physical count by UII.

C5.7.5.2.3.1.2. Installation (post, camp, base, station) level shall do a 100 percent semiannual count by UII.

C5.7.5.2.3.1.3. Depot level shall do a 100 percent annual physical inventory.

C5.7.5.2.3.1.4. Where the items are banded and crated, the inventory shall consist of a 100 percent count, as reflected by the number of items listed on the crates. Any evidence of tampering shall be cause for a crate to be opened and a 100 percent count taken of the contents. Inventory records shall be maintained for a minimum of 2 years.

C5.7.5.2.3.1.5. Inventory organizations may use the number of items listed on banded containers for first and second counts of sensitive conventional arms; however, the definitive count shall be the formal third count, which consists of the 100 percent count of individual weapons comprising the containers.

C5.7.5.2.3.2. DoD Components having custody or accountability of Category II or III Non-Nuclear Missiles and Rockets shall conduct physical inventories according to DoD 4000.25-2-M, Chapter 7 (reference (g)) and as follows:

C5.7.5.2.3.2.1. Unit level shall do a 100 percent quarterly physical count by UII.

C5.7.5.2.3.2.2. Installation (post, camp, base, station) level shall do a 100 percent semiannual physical count by UII.

C5.7.5.2.3.2.3. Depot level shall do a 100 percent annual physical count.

C5.7.5.2.3.2.4. Where the items are banded and crated, the inventory shall consist of a 100 percent count as reflected by the number of items listed on the crates. Any evidence of tampering shall be cause for a crate to be opened and a 100 percent count taken of the contents. Inventory records shall be maintained for a minimum of 2 years.

C5.7.5.2.3.3. Ammunition and Explosives units, installations, depots etc., having custody or accountability of Category I, II, III, or IV Ammunition or Explosives, shall conduct physical inventories according to DoD 4000.25-2-M (reference (g)), DoD 5100.76-M (reference (aa)), and as required in subparagraphs C5.7.5.2.3.3.1. through C5.7.4.2.3.3.4., below. The DoD Components may prescribe more frequent inventories, as required.

C5.7.5.2.3.3.1. Unit level shall do a 100 percent monthly physical count of the contents of any unsealed containers.

C5.7.5.2.3.3.2. Installation (post, camp, base, station) level shall do a 100 percent semiannual physical count of the contents of any unsealed containers.

C5.7.5.2.3.3.3. Depot level shall do physical inventories, as a minimum, according to DoD 4000.25-2-M (reference (g)).

C5.7.5.2.3.3.4. Where the items are banded and crated at the unit or installation level, the inventory shall consist of a 100 percent count, as reflected by the number of items listed on the crates. Any evidence of tampering shall be cause for a crate to be opened and a 100 percent count taken of the contents. Inventory records shall be maintained for a minimum of 2 years.

C5.7.5.2.3.4. Before any loss of materiel in subparagraphs C5.7.5.2.3.1., C5.7.5.2.3.2., or C5.7.5.2.3.3., above, may be attributed to an inventory or accountability discrepancy, it must be determined through investigation that the loss was not the result of theft or misappropriation.

C5.7.5.2.4. In addition to the requirements specified in subparagraph C5.7.5.2.1., above, all DoD Components having custody of Controlled Cryptographic Items (CCIs) shall perform a complete physical inventory at periodic intervals not to exceed 12 months between successive inventories, according to NSTISSI No. 4001 (reference (ab)). This inventory shall include all CCI equipment and uninstalled CCI components. This is necessary to guard against preventable losses of unkeyed CCI to an actual or potential adversary.

C5.7.5.2.5. The detailed procedures apply to all inventories not specifically excluded by this Regulation.

C5.7.5.2.6. The DUSD(L&MR) is responsible for overall policy, direction, and oversight of the physical inventory control of DoD supply system materiel.

C5.7.5.2.7. The Heads of the DoD Components shall:

C5.7.5.2.7.1. Establish and maintain a physical inventory control program complying with this Regulation, and ensure that processing of inventory results to accounting records complies with Chapter 55 of Volume 11B of DoD 7000.14-R (reference (h)).

C5.7.5.2.7.2. Provide management priority and resources for the execution of physical inventory control program functions.

C5.7.5.2.7.3. Ensure that assets are protected against waste, loss, negligence, unauthorized use, misappropriation, and compromise in the case of controlled inventory item materiel.

C5.7.5.2.7.4. Ensure that the procedures of DoD 4000.25-2-M and DoD 4000.25-M (references (g) and (x)) are adhered to except when the DUSD(L&MR) approves a written request for a waiver.

C5.7.5.2.7.5. Ensure that sufficient emphasis is placed on materiel accountability and inventory accuracy to promote improved performance of individuals directly responsible for the care, security, and management of DoD supply system materiel, as well as those responsible for making reports on the status of that inventory.

C5.7.5.2.7.6. Ensure that duties, such as receiving, posting transactions to records, and issuing, are divided among the work force so that no single individual can adversely affect the accuracy and integrity of the inventory. Although

multi-skilled personnel may conduct physical counts, the inventory organization must enter counts, apply in-float controls, and conduct pre-adjustment research.

C5.7.5.2.7.7. Conduct functional reviews of the physical inventory control program to ensure compliance with DoD and Component policy and procedures and establish physical inventory control as a mandatory element to be addressed in the annual internal management control assessments required by DoD Directive 5010.38 (reference (z)).

C5.7.5.2.7.8. Ensure that training is provided to supply system personnel who perform functions affecting physical inventory control and that training courses are updated to teach current DoD policies, procedures, and performance goals.

C5.7.5.2.7.9. Provide representatives to serve on the Joint Physical Inventory Working Group (JPIWG).

C5.7.5.2.7.10. The owning Military Service or Defense Agency shall assume or assign the accountability for materiel not in the physical custody of a storage activity, such as materiel inducted for organic maintenance, materiel in a contractors hands (according to the provisions in Part 45 of the FAR (reference (ac))), materiel intransit; and materiel on loan.

C5.7.5.2.8. The DLMSO shall:

C5.7.5.2.8.1. Establish a program administrator to serve as the DoD focal point for the DoD PICP, according to this Regulation.

C5.7.5.2.8.2. Ensure compatibility of physical inventory control procedures with all other DoD standard systems.

C5.7.5.2.8.3. Assist in resolving problems that arise during system operations and those that are reported to the program administrator.

C5.7.5.2.8.4. Ensure uniform implementation of physical inventory requirements and procedures by the DoD Components.

C5.7.5.2.9. The DoD PICP Administrator shall:

C5.7.5.2.9.1. Develop and publish procedural guidelines for the physical inventory control of DoD supply system materiel, coordinate proposed DLMS changes, according to this Regulation, and reconcile problems among the DoD Components.

C5.7.5.2.9.2. Serve as the Chair for the JPIWG.

C5.7.5.2.10. The JPIWG shall recommend guidance and develop program enhancements for the physical inventory control of DoD supply system materiel, according to the JPIWG Charter. (See Appendix 12, below.)

C5.7.6. Care of Supplies in Storage (COSIS)

C5.7.6.1. Requirements

C5.7.6.1.1. A COSIS program shall be established to ensure that materiel in storage is maintained in ready for issue condition or to prevent deterioration of unserviceable materiel.

C5.7.6.1.2. The COSIS program shall include:

C5.7.6.1.2.1. A quality assurance program for inspection and/or test.

C5.7.6.1.2.2. A system for reporting and recording of quality assurance data.

C5.7.6.1.2.3. Provisions for the entry of the condition of materiel into the total item property record.

C5.7.6.1.2.4. A system to ensure that corrective actions for deficiencies uncovered during inspections are done to restore the items to serviceable condition or protect unserviceable materiel from deterioration.

C5.7.6.1.3. The IMMs are responsible for specifying the COSIS requirements and funding the COSIS costs.

C5.7.6.1.4. Storage activities are responsible for providing protection from the elements and environmental conditions by providing proper storage facilities, preservation, packing, marking, or a combination of those measures and for the execution of the COSIS program.

C5.7.6.2. Procedures. The DLA shall publish the detailed procedures for the conduct of the DoD COSIS Program.

C5.7.7. Shelf-Life Program

C5.7.7.1. Requirements

C5.7.7.1.1. A Shelf-Life Program shall be established to provide special emphasis for those items with known deteriorative characteristics to reduce the risk of shelf-life expiration. Internal management controls shall be established and maintained to monitor shelf-life items through out their supply chain, according to DoD Directive 5010.38 (reference (z)).

C5.7.7.1.2. Stocks of shelf-life items shall be maintained at the minimum quantities consistent with operational readiness to minimize the risk of shelf-life expiration.

C5.7.7.1.3. Activities storing shelf-life items shall:

C5.7.7.1.3.1. Adhere to the Shelf-Life Extension System (SLES) and to FED-STD-793A (reference (ad)) for GSA-managed items, which both specify the instructions for the inspection, testing, and restoration of items in storage.

C5.7.7.1.3.2. Initiate controls to minimize expiration of materiel in storage by issuing the oldest stocks first, except where issue of newer stocks is justified. Expeditiously report expired stock to the managing ICP for redistribution or disposal.

C5.7.7.1.3.3. Provide surveillance to ensure that items are in a ready-for-issue or ready-for-use condition, according to SLES, FED-STD-793A (reference (ad)), or other applicable technical documentation.

C5.7.7.2. Procedures

C5.7.7.2.1. The procedures for the DoD Shelf-Life Program are in DoD 4140.27-M (reference (f)). The Director of DLA shall be responsible for coordinating, publishing, and maintaining reference (f).

C5.7.7.2.2. The DUSD(L&MR) shall establish policy for the Shelf-Life Program and ensure implementation of that policy in a uniform manner throughout the Department of Defense.

C5.7.7.2.3. The Secretaries of the Military Departments, or designees, and the Director of DLA shall:

C5.7.7.2.3.1. Establish and maintain a Shelf-Life Program, complying with this Regulation and DoD 4140.27-M (reference (f)), and ensure that procedures for designating, issuing, and managing shelf-life items in retail and wholesale inventories are compatible.

C5.7.7.2.3.2. Provide management priority and resources for the execution of shelf-life functions, and conform to the latest technological changes.

C5.7.7.2.3.3. Designate shelf-life items by type, prescribe associated shelf-life periods, and develop technical documentation establishing a database and inspection and test criteria, according to the SLES and FED-STD-793A (reference (ad)).

C5.7.7.2.3.4. Provide uniform packaging for assigned shelf-life items, according to this Regulation.

C5.7.7.2.3.5. Provide technical and engineering support on a reimbursable basis for the DLA and, on request, the GSA, the Federal Aviation Administration (FAA), the United States Coast Guard (USCG), and the National Aeronautics and Space Administration (NASA).

C5.7.7.2.3.6. Ensure that the procedures of DoD 4140.27-M (reference (f)) are adhered to, except when the Director of the DoD Shelf-Life Program has approved a written request for a waiver.

C5.7.7.2.3.7. Conduct functional reviews of the Shelf-Life Program to ensure compliance with DoD and Component policy and procedures and establish shelf-life as a mandatory element to be addressed in the annual management control assessments required by DoD Directive 5010.38 (reference (z)).

C5.7.7.2.3.8. Ensure that training is provided to supply system personnel who perform functions affecting shelf life and that training courses are updated to teach current DoD policies, procedures, and performance goals.

C5.7.7.2.3.9. Submit management reports, according to instructions and formats in DoD 4140.27-M (reference (f)). The reporting requirements have been assigned Reports Control Symbols DD-A&T(L)(SA)1549 and DD-A&T(L)(A)1902.

C5.7.7.2.3.10. Manage, receive, store, issue, and dispose of shelf-life hazardous materials, according to laws and regulations, to minimize the generation of hazardous waste.

C5.7.7.2.3.11. Comply with and participate in the DoD Shelf-Life Board Charter in DoD Directive 5010.38 (reference (z)).

C5.7.7.2.3.12. Utilize the SLES DoD Quality Status list on-line system to determine the inspection and test criteria and to determine if laboratory-tested type-II shelf-life material has been extended.

C5.7.7.2.4. The Director, DLA, shall:

C5.7.7.2.4.1. Administer the DoD Shelf-Life Management Program.

C5.7.7.2.4.2. Appoint a DoD Shelf-Life Program Director whose duties shall include the Chair for the DoD Shelf-Life Board under the Charter in DoD Directive 5010.38 (reference (z)).

C5.7.7.2.5. The DoD Shelf-Life Program Director, shall:

C5.7.7.2.5.1. Monitor the effectiveness of the Shelf-Life Program and recommend guidance or program changes.

C5.7.7.2.5.2. Prepare and evaluate summary management reports, according to instructions and formats in DoD 4140.27-M (reference (f)). The reporting requirements have been assigned Reports Control Symbols DD-A&T(A)1549 and DD-A&T(L)1902.

C5.7.7.2.5.3. Determine the adequacy of the reporting and surveillance techniques that measure the degree to which the program objectives are achieved are adequate.

C5.7.7.2.6. The Heads of the DoD Components and, by agreement, the Administrator, the GSA, the FAA, the USCG, and the NASA shall comply with FED-STD-793A (reference (ad)), this Regulation, and DoD 4140.27-M (reference (f)).

C5.7.8. Security of Materiel

C5.7.8.1. Requirements

C5.7.8.1.1. A Physical Security Program shall be established and executed to prevent or reduce the potential for theft, fraud, sabotage, and abuse of DoD materiel. The program shall include the following:

C5.7.8.1.1.1. Entry control, detection, communication, and response systems capable of deterring and defeating criminal activities.

C5.7.8.1.1.2. A system to monitor the effectiveness of security measures based on routine analysis of loss rates through inventories, Financial Liability Investigation of Property Loss reports, and criminal incident reports, to establish whether repetitive losses show criminal or negligent activity and the need for additional physical security measures.

C5.7.8.1.2. Emphasis shall be placed on employing technology to minimize manpower requirements by acquiring mechanical and/or electronic security devices. Specialized software should be employed where possible to identify irregular or questionable patterns of requisitions and other supply activity.

C5.7.8.2. Procedures

C5.7.8.2.1. The procedures for maintaining physical security of supply system inventories are in DoD 5200.8-R (reference (ae)).

C5.7.8.2.2. The procedures for maintaining physical security of conventional arms, ammunition, and explosive materiel are in DoD 5100.76-M (reference (aa)).

C5.7.8.2.3. The procedures for maintaining security of chemical agents are in DoD Directive 5210.63 (reference (af)).

C5.7.8.2.4. The procedures for safeguarding sensitive, controlled, and pilferable items, and controlled substances are in DLAR 4145.11/AR740-7/NAVSUPINST 4440.146C/MCO 4450.11A.⁶

⁶ Joint issuance DLAR 4145.11/AR740-7/NAVSUPINST 4440.146C/MCO 4450.11A, "Safeguarding of DLA Sensitive Inventory Items, Controlled Substances and Pilferable Items of Supply," February 1, 1990, can be found at website <http://www.dlaps.hq.dla.mil/dlar/r4145.11.htm>.

C5.8. INTRANSIT ASSET VISIBILITY

C5.8.1. Requirements

C5.8.1.1. Timely, accurate intransit asset information shall be available to all users and logistics managers in a standard format adequate to satisfy needs.

C5.8.1.2. Visibility and accountability of intransit assets shall be available and maintained as part of an integrated capability that allows line items to be tracked by a standard method throughout the entire transportation pipeline and linked to the related requisition, return, or procurement.

C5.8.1.3. Line-item manifest and/or packing information shall be available on DoD standard electronic media to provide rapid identification of the contents of containers, pallets, and consolidation shipments.

C5.8.1.4. Policies, procedures, and electronic transactions shall be standardized throughout all segments of the Defense Transportation System to maintain item visibility. That includes access to commercial carrier automated in-transit systems.

C5.8.2. Procedures

C5.8.2.1. Each line item shall be discreetly identified and linked with those shipment identifiers necessary to maintain intransit asset visibility. To the extent possible, that shall be through the use of a TCN. If a commercial carrier does not use the TCN, the carrier's organic number should be linked to the TCN.

C5.8.2.2. Linkage among various nodes of the transportation pipeline shall be achieved by using a "Consolidated Shipment Information" transaction. The transaction shall link the requisition or document number to the shipment TCN, any intermediate consolidation TCN, and the conveyance TCN.

C5.8.2.2.1. The consolidated transaction shall be in a fixed format. Standards for the consolidated transaction shall be included in the DoD 4500.9-R (Part II) (reference (q)).

C5.8.2.2.2. When requisitions or shipments are consolidated, the consolidating activity shall submit the applicable consolidated transactions to show the consolidation action.

C5.8.2.3. Status information on intransit assets shall be available to customers on demand in near real-time.

C5.8.2.4. Procedures for retrograde materiel and materiel going to disposal shall mirror that used for ready-for-issue materiel in transit.

C5.8.2.5. Transportation data shall be available for each node in the transportation pipeline. That shall include arrival and departure information for each node. That information shall be related to line-item data for shipments in transit.

C5.8.2.6. Carriers with electronic communication capabilities shall provide the status of shipments moving commercially to the extent that interfaces can be established and are operationally or cost beneficial.

C5.8.2.7. Transportation receipt conformation shall be captured. Positive identification of receiving personnel may aid tracking of frustrated intransit materiel.

C5.8.2.8. Ensured communications shall be made available to transmit transactions once status data is on line.

C5.8.2.9. Standard procedures for in-transit reporting shall be extended into retail operations to the extent it is operationally beneficial and should include visibility of assets going to disposal.

C5.8.2.10. The DLMS shall have the standards required to achieve order status tracking to the maximum extent practicable. The Defense Transportation Regulation (reference (q)) and the theater-unique DoD Regulations shall be modified, as necessary, to implement these logistics standards uniformly worldwide.

C5.8.2.11. To deal with the diversity of the DoD operating environments, as well as the large number of commercial and military activities involved in DoD materiel distribution, any variety of automated identification technologies (such as bar codes, laser optical cards, memory or smart cards, and radio frequency devices) may be attached to consolidated shipments to ensure line-item visibility and reduce in-processing time.

C5.9. HAZARDOUS MATERIALS

C5.9.1. Requirements

C5.9.1.1. Hazardous materials storage and handling policies and procedures shall be as uniform as possible. The DoD Components shall follow hazardous materials guidelines and policies set forth by the Department of Defense and their respective headquarters.

C5.9.1.2. The DoD Components shall reduce hazardous materials use and long-term storage as much as possible.

C5.9.1.2.1. When ordering materials, users shall give priority to the selection of environmentally friendly or non-hazardous substitutes.

C5.9.1.2.2. When possible, the DoD Components should use commercial, direct-vendor sources to provide hazardous materials to users.

C5.9.1.2.3. Hazardous materials should be delivered by the most direct means possible and with the least amount of handling to reduce product damage and potential harm to the environment.

C5.9.1.2.4. Additionally, hazardous materials should be ordered in the minimal quantities needed, properly stored, and properly used within their shelf life to reduce hazardous waste and to promote personnel safety and DoD-community relations.

C5.9.1.3. The DoD Components shall protect and train DoD personnel involved in the safe and compliant storage, handling, movement and disposal of hazardous materials.

C5.9.2. Procedures

C5.9.2.1. The DoD Components shall comply with applicable Federal, State, local, and host-nation laws in addition to applicable DoD Directives, Instructions, and Regulations; etc., on the environmental effects, distribution, storage, use, handling, and transportation of hazardous materials and hazardous wastes, including radioactive items. The procedures governing the movement of hazardous material are in DoD 4500.9-R (Part II) (reference (q)). Disposal procedures are in DoD 4160.21-M, Chapter 10 (reference (ag)).

C5.9.2.2. Ammunition and explosives, defined as "United Nations Class 1 items," regardless of division, form a unique subset of hazardous materials. DoD

6055.9-STD (reference (ah)) and DoD ammunition and explosives safety Manuals and Regulations govern the receiving, storing, and handling of ammunition and explosives at DoD activities.

C5.9.2.3. The procedures in DLAI 4145.25/AR 700-68/NAVSUPINST 4440.128D/AFJMAN 23-22(I)/MCO 10330.2D⁷ govern the storage and handling of compressed gases and liquids in cylinders, as well as the storage and handling of the cylinders themselves. Full, partially full, and empty compressed gas cylinders in the DoD supply system shall be classified uniformly as to condition status. The DoD Components shall ensure that storage practices maintain serviceability of the cylinders with minimum costs and that products delivered to customers are satisfactory for their intended use.

C5.9.2.4. The procedures in the DLAI 4145.11/TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO P4450.12A⁸ govern the storage and handling of hazardous materials.

C5.9.2.5. The DoD Components shall follow the procedures in DLAI 4145.8/AFJI 23-504/MCO P4400.105D⁹ to control radioactive items. That requirement does not apply to nuclear reactors and nuclear weapons, except for components and ancillary equipment that are common to other end items of supply or unique radioactive materials used as research, test, or production devices.

C5.9.2.6. All DoD Components responsible for material research and development shall ensure that non-radioactive and non-hazardous substitutes are used when feasible and less hazardous than the radioactive materials or hazardous materials currently in use.

C5.9.2.7. All DoD proposals to introduce radioactive materials into the DoD supply system shall include a justification and a cost-benefit analysis that considers disposal concerns and personnel safety and includes a comparison of alternative methods.

⁷ Joint issuance DLAI 4145.25/AR 700-68/NAVSUPINST 4440.128D/AFJMAN 23-227(I)/MCO 10330.2D, "Storage and Handling of Liquefied and Gaseous Compressed Gasses and their Full and Empty Cylinders," June 16, 2000, can be found at website <http://www.dlaps.hq.dla.mil/i4145.25.pdf>.

⁸ Joint issuance TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO P4450.12A/DLAI 4145.11, "Storage and Handling of Hazardous Material," January 13, 1999, can be found at website <http://www.dlaps.hq.dla.mil/i414511.pdf>.

⁹ Joint issuance DLAI 4145.8/AFJI 23-504/MCO P4400.105D, "Materiel Management for Radioactive Items in the DoD," February 15, 2000, can be found at website <http://www.dlaps.hq.dla.mil/dlai/i4145.8.htm>.

C5.9.2.8. All DoD material managers shall ensure that products with regulated hazardous components or composition are properly marked, labeled, and identified in automated data processing systems (e.g., Hazardous Materials Information Resource System (HMIRS), Distribution Standard System, Environmental Reporting Logistics System, etc.). All items covered by the hazardous material definition in FED-STD-313 D (reference (ai)) shall be identified and tracked as hazardous materials throughout the DoD supply chain, including returns and disposals. All hazardous materials shall be officially recorded in the HMIRS with a unique Material Safety Data Sheet (MSDS) number prior to its acceptance; and to the extent possible, all packages and appropriate movement documents shall be marked with a corresponding unique MSDS number from its supply origin. In addition, DoD materiel managers shall coordinate with the DoD Component's licensee or authorized radiological focal point to ensure that all radioactive items are identified in the HMIRS.

C5.9.2.9. The DoD Components shall demonstrate leadership in pollution abatement and cooperate in abatement programs with local communities.

C5.9.2.10. Local unions shall be advised of the types of hazardous materials being handled and stored at an installation.

C5.10. MATERIEL DISPOSITION

C5.10.1. Requirements

C5.10.1.1. Materiel available in the materiel disposition system shall be used to the extent practicable to prevent concurrent procurement and disposal, or to prevent the repair of unserviceable items when serviceable items are available.

C5.10.1.1.1. The IMMIs shall use reclamation instead of procurement or repair to obtain components to meet current requirements when it is timely and economical to do so. Current requirements are those within the AAO.

C5.10.1.1.2. Retail supply activities shall have visibility of assets transferred to the DRMS and may withdraw assets for their own use.

C5.10.1.2. Reutilization, transfer, and donation screening times shall be as short as practicable to expedite the disposal of materiel.

C5.10.1.3. Sales shall be done after screening has been completed and demilitarization requirements have been accommodated.

C5.10.1.4. The DoD Components shall identify and apply applicable controls, worldwide, over materiel to prevent its unauthorized use. Materiel that is designated by the OSD to require demilitarization, or that is related to articles on the U.S. Munitions List under 22 CFR 121 or the Commerce Control List under 15 CFR 774 (references (aj) and (ak)) and found by the DoD Components to have, directly or indirectly, a significant military utility or capacity, shall be controlled and/or demilitarized to the extent necessary to eliminate its functional or military capabilities. (See DoD 4160.21-M-1, reference (al).)

C5.10.1.5. The following laws and programs concerned with the disposition of special categories of materiel apply:

C5.10.1.5.1. Under 10 U.S.C. 2576 (reference (b)), the Department of Defense may sell to State and local law enforcement and firefighting agencies at fair market value surplus pistols, revolvers, shotguns, rifles (of a caliber not exceeding .30), and ammunition for these weapons; gas masks; and protective body armor that have survived all required screening.

C5.10.1.5.2. Under Section 203(j)(2) or the "Federal Property and Administrative Service Act of 1949," as amended (40 U.S.C. 484(j)(2) (reference (am))), certain DoD surplus personal property may be made available to Military Service educational activities to foster and encourage the educational purposes of such activities.

C5.10.1.5.3. The DoD Components that generate precious metal-bearing scrap or residual material or require precious metals shall participate in the DoD Precious Metals Recovery Program (PMRP), as administered by the Director, DLA. (See DoD 4160.21-M, reference (ag).) Federal Civil Agencies may also participate in the DoD PMRP. The DoD Components and Federal Civil Agencies shall use materials recovered under the PMRP for authorized internal use or as GFM to reduce new procurement costs.

C5.10.1.5.4. Under 40 U.S.C. 512(a) (reference (am)), the DoD Components may transfer foreign excess personal property for foreign currencies or credits, substantial benefits, or the discharge of claims resulting from the compromise or settlement of such claims, according to applicable law, when the DUSD(L&MR) determines that the transfer is in the interests of the United States.

C5.10.1.5.5. Under 10 U.S.C. 2572 (reference (b)), the Military Departments may loan, give, or exchange documents, historical artifacts, and condemned

or obsolete combat materiel to benefit the Department of Defense's historical collection and associated educational programs, according to the provisions of DoD 4160.21-M and DoD 4160.21-M-1 (references (ag) and (al)).

C5.10.1.5.6. Under 15 U.S.C. 3710(i) (reference (an)), commonly known as the "Stevenson-Wydler Technology Innovation Act," a laboratory, Agency, or Department may donate excess research equipment to educational institutions and non-profit organizations for technical, scientific education, and research activities, according to the provisions of DoD 4160.21-M (reference (ag)) and DoD Instruction 5535.8 (reference (ao)).

C5.10.2. Procedures

C5.10.2.1. The Director, DLA, shall administer the Defense Material Disposition Program including reutilization, transfer, donation, sales, loans, gifts, hazardous property disposal, PMRP, demilitarization, and trade security controls.

C5.10.2.2. Policies, procedures, and responsibilities for materiel disposition (including hazardous material and hazardous waste disposal) are in DoD 4160.21-M (reference (ag)).

C5.10.2.3. Policies, procedures, and responsibilities for demilitarization are in DoD 4160.21-M-1 (reference (al)).

C5.11. CONTROL OF ACCESS TO DoD MATERIEL INVENTORIES REQUIRED BY DEFENSE CONTRACTS

C5.11.1. Requirements

C5.11.1.1. Contractors shall supply all materiel required for the performance of U.S. Government contracts. In rare occasions, the U.S. Government may supply such materiel to achieve significant economy, standardization, or expedited production, or when it is otherwise in the U.S. Government's best interest.

C5.11.1.2. In executing the above requirement, the DoD Components shall:

C5.11.1.2.1. Use DoD 4000.25-M and DoD 4000.25-1-M (references (x) and (r)) to provide DoD materiel to a contractor when, for reasons of significant economy, standardization, or expedited production, or when it is, otherwise, in the Government's best interest.

C5.11.1.2.2. Document and consider a decision to provide, or not to provide, DoD materiel to a contractor as a part of the maintenance and supply support elements of integrated logistics support planning.

C5.11.2. Procedures

C5.11.2.1. Each DoD Component authorizing the use of DoD materiel by contractors shall establish one or more management control activities (MCAs) to maintain control over all requisitions submitted to the DoD wholesale supply system by contractors and by DoD Component activities when such DoD Component activity requisitions indicate shipment to a contractor. The MCA shall carry out the procedures in DoD 4000.25-1-M (reference (r)) and shall establish a system that:

C5.11.2.1.1. Validates and approves all contractor-initiated requisitions and DoD-initiated materiel requisitions that are coded for direct shipment to a contractor.

C5.11.2.1.2. Restricts contractor access to specific predetermined items and quantities of those items by ensuring requisition validity, adequate authority, and consistency with the terms of an existing contract.

C5.11.2.1.3. Rejects contractor and DoD-initiated materiel requisitions that do not comply with the requirements of an existing contract.

C5.11.2.1.4. Passes approved requisitions to the applicable DoD source for supply action.

C5.11.2.1.5. Maintains a continuing record of the quantity of each item authorized as Government property provided to contractors the applicable amount each time a requisition for the item is validated for issue.

C5.11.2.1.6. Causes DoD supply sources to provide notification of shipment of DoD materiel to the MCA, which validated the requisition for comparison of DoD materiel shipment notification with validation records to verify that no shipment has been made without a corresponding record of verification.

C5.11.2.2. DoD supply sources shall refer requisitions for DoD materiel provided to contractors that have not passed through, and been approved by, an MCA back to the cognizant MCA for review and applicable action.

C5.11.2.3. The MCAs shall establish a management reporting system that:

C5.11.2.3.1. Maintains a contract, requisition, and shipment status history file that serves as an auditable record of transactions involving DoD materiel provided to contractors.

C5.11.2.3.2. Provides the DoD contract administration offices a status report showing all shipments of DoD materiel to contractors and to DoD activities for subsequent shipment to contractors, as well as all materiel requisitions that were rejected.

C5.11.2.4. Information Requirements. Each MCA shall prepare the DoD materiel status report required by subparagraph C5.11.2.3.2., above, for the quarterly reporting periods ending March 31, June 30, September 30, and December 31, using DD Form 2543, "Government Furnished Material (GFM) Status Report," and provide the report to the cognizant DoD contract administration office. Report Control Symbol DD-A&T(Q)1575 applies.

C5.11.2.5. The DUSD(L&MR) shall establish and maintain policy for and monitor the control of access to DoD inventories.

C5.11.2.6. The Heads of the DoD Components shall carry out the requirements and procedures in this section of the Regulation and shall:

C5.11.2.6.1. Establish all required MCAs.

C5.11.2.6.2. Execute all procedures specified in DoD 4000.25-1-M (reference (r)).

C5.11.2.6.3. Refer all requests for waivers from this section of the Regulation through the DoD Component Headquarters to the Assistant Deputy Under Secretary of Defense (Supply Chain Integration) (ADUSD(SCI)).

C5.11.2.7. The Director, DLMSO, shall develop and maintain procedures supporting this section of the Regulation to control contractor access to DoD materiel inventories.

C6. CHAPTER 6

RETURN

C6.1. MATERIEL RETURNS

C6.1.1. Requirements

C6.1.1.1. The DoD Components shall establish criteria and implementing procedures and systems for managing and authorizing materiel returns to the wholesale supply system based primarily on the contribution of such returns to improvement of inventory performance as prescribed in subparagraph C2.4.2.2., above.

C6.1.1.2. The DoD Components shall utilize the intransit asset visibility capabilities, whenever possible, as prescribed in section C5.8., above, as the basis for identification and selection of materiel to be returned from organizational echelons below the wholesale system to wholesale locations.

C6.1.1.3. The IMM shall consider authorized materiel return assets in determining future procurement or repair requirements for items whose projected requirements are dependent on forecasted demands.

C6.1.1.4. The DoD Components shall ensure that returned material is fully visible to applicable managers at all echelons upon initial shipment. Returned or retrograde shipments should be categorized automatically as to type of return; i.e., excess, unserviceable, defective or other redistribution stocks. Physical units of materiel should be identified as to type of return using appropriate tags, labels, color codes or other identifying devices, including radio frequency identification and bar coding.

C6.1.1.5. The IMMs, with owning activities, should develop plans for return (physical shipment) of serviceable and unserviceable materiel according to projected material requirements and applicable maintenance production schedules.

C6.1.2. Procedures

C6.1.2.1. The DoD Components shall implement the above materiel returns policies using applicable logistics standard systems and data procedures as prescribed in section C8.6., below.

C6.1.2.2. The DoD Components shall implement the following additional materiel returns management procedures:

C6.1.2.2.1. The DoD Components should develop analytical capabilities to assess trends in serviceable and unserviceable returns relative to volume of issues and to identify discrepancies or out-of-tolerance conditions.

C6.1.2.2.2. Where possible, return authorizations should be generated automatically from asset management systems.

C6.1.2.2.3. The IMM shall establish an asset due-in quantity upon directing materiel to be returned to a wholesale stockage or repair location or when the IMM receives confirmation that such materiel has been shipped to a wholesale distribution or maintenance depot.

C6.1.2.2.4. The priority for application of serviceable material return due-in assets to requirements shall be second only to that of serviceable on-hand assets. They shall be considered before applicable unserviceable items (whether scheduled or not scheduled for repair), items on-order under contract, and items on-order for which funds have been committed, but that are not yet under contract.

C6.1.2.2.5. If a serviceable return can be identified to its originating requisition, it shall be treated as a cancellation of that requisition, and demand history adjusted accordingly. If the originally recorded demand contributed to the current forecast of demand, then the forecast and all associated levels should be adjusted accordingly. In cases where actual returns data are not available for use in the requirements process, the DoD Components may use percentage factors or other applicable methods to adjust requirements until systemic deficiencies are resolved.

C6.1.2.2.6. Serviceable returns that cannot be identified to originating requisitions shall be used to develop a serviceable returns forecast. Forecasted returns shall then be considered as potential assets to offset buy or repair requirements, but only to the extent that they exceed the level of returns already counted in asset records as materiel due-in.

C6.1.2.2.7. To avoid supply shortages caused by returns of serviceable or unserviceable assets that are not issuable, the DoD Components may adjust the returns forecast by factors representing the expected likelihood of receiving such assets in the returns process or the adjusted capable-of-repair rate of unserviceable returns. The DoD Components may also use these factors to limit the portion of the procurement or repair requirement that may be offset by forecasted returns.

C6.1.2.2.8. U.S. Government activities returning materiel are cautioned that the returning activity may be held responsible for costs incurred by the receiving activity when discrepancies are reported and validated. Recoupment action by the IMM against the initiator may include all cost reimbursable actions performed by the receiving activity such as repackaging, marking, and/or disposal.

C6.1.2.2.9. The IMM shall pay the packing, crating, handling, and transportation costs associated with all directed returns. The retail owner of materiel should consider retaining, disposing, or consolidating assets to limit returns where the shipping costs exceed the value of the assets. The wholesale manager shall also pay storage costs for assets identified by the manager for temporary retention.

C6.1.2.2.10. The IMM may set dollar thresholds to avoid uneconomical reporting and return of assets above retail retention limits. For assets below the threshold, the owning activity should consider retaining, disposing, or consolidating those assets where the reporting costs exceed the value of the assets.

C6.2. RETURN OF DEFECTIVE MATERIEL

C6.2.1. Requirements

C6.2.1.1. DoD wholesale or retail managers shall make a timely disposition determination on defective materiel that is under their control or reported by the using organizations. Materiel is considered defective when, during its warranty period, it fails to function properly due to design, materials, or manufacturing shortcomings. If the materiel is not covered by a warranty, it is considered defective if it fails to function properly either when initially installed or put to attempted use, or for a period of time that is substantially less than is common for similar materiel.

C6.2.1.2. To guide wholesale or retail managers in making economically viable disposition decisions, the DoD Components shall establish criteria such as cost-to-process and cost-to-ship.

C6.2.1.3. Using organizations shall receive from wholesale or retail managers either a financial credit for the defective materiel or its free replacement. To gain restitution for defective materiel supplied directly from a commercial source, the using organization should report the materiel to both the source and the contracting officer managing the contract for the commercial source for appropriate action.

C6.2.2. Procedures

C6.2.2.1. Managing and using organizations should verify that materiel is defective before initiating disposition actions.

C6.2.2.2. Defective materiel may be returned by the using organization to a location the wholesale or retail manager determines. Defective materiel also may be retained in-place (if the using organization agrees) pending a final disposition decision by the wholesale or retail manager, or it may be disposed through the DRMS.

C6.2.2.2.1. Packing, crating, handling and transportation costs associated with all directed returns shall be borne by the appropriate wholesale or retail manager.

C6.2.2.2.2. When disposing defective materiel through the DRMS, the materiel and paperwork must be clearly annotated with the words "defective" and given an appropriate condition code to prevent inadvertent reuse by the Department of Defense and keep defective material out of commerce.

C6.2.2.2.2.1. The disposal procedures in DoD 4160.21-M (reference (ag)) apply.

C6.2.2.2.2.2. Where economically justified, disposition may be accomplished through the local trash collection system. Generally, placing the materiel in the local trash collection system is not permitted for hazardous materiel, sensitive items, arms and ammunition, and drugs and pharmaceuticals.

C6.2.2.2.2.3. The disposal of defective materiel requiring demilitarization shall be done according to DoD 4160.21-M-1 (reference (al)).

C6.2.2.3. Where a warranty right exists and/or it is economical to do so, the DoD Components shall pursue from the appropriate supplier either a replacement of the defective materiel or refund/credit for it.

C6.3. RETURN OF MATERIEL FOR MAINTENANCE, REPAIR, OR OVERHAUL

C6.3.1. Requirements

C6.3.1.1. The DoD Components shall project anticipated returns of unserviceable/reparable items and shall consider such projected assets, on an item-by-item basis, as applicable to approved reparable item maintenance requirements for purposes of asset stratification, induction of unserviceable assets for maintenance, and maintenance budget development.

C6.3.1.2. The DoD Components shall ensure that all field-level reparable or depot-level reparable items that are determined to be in a condition that merits economical maintenance, repair, or overhaul and are applicable to approved requirements are returned to designated maintenance facilities to effect timely return to serviceable condition. This includes procedures to return unserviceable assets directly to a commercial repair facility when that facility is the designated maintenance facility for an item and to make those assets visible to the IMM.

C6.3.1.3. The DoD Components should provide for an automated capability to track the return of unserviceable assets to help maximize the unserviceable return rate and provide visibility for expediting returns that could satisfy high-priority demands.

C6.3.1.4. The level of repair classification and determination of eligibility for maintenance action shall be accomplished as prescribed in section C2.3., above.

C6.3.2. Procedures

C6.3.2.1. For all secondary items, the assigned IMM shall be the authority for approving all returns of unserviceable materiel to designated depot maintenance or wholesale distribution activities.

C6.3.2.1.1. Approval of unserviceable returns should be based on:

C6.3.2.1.1.1. Serviceable and unserviceable on-hand asset availability against future requirements.

C6.3.2.1.1.2. Projected future maintenance requirements.

C6.3.2.1.1.3. Transportation and handling costs.

C6.3.2.1.1.4. Item design stability and impact of technological changes.

C6.3.2.1.1.5. Availability of maintenance capacity and resources.

C6.3.2.1.1.6. Availability and cost of manufacturing or alternative sources over the life cycle of end item applications.

C6.3.2.1.2. For unserviceable depot reparable items, approval of return of unserviceable assets considered economically repairable shall normally be automatic and coded as such in official catalog documents.

C6.3.2.2. The DoD Components shall establish procedures to provide credit for unserviceable assets returned for maintenance. Procedural mechanisms may be based on providing funding credit for returns, adjustments to item price in consideration of carcass value or cost to repair, or physical receipt of reparable units. In any case, credit return procedures should consider factors such as impact of return decisions on customer wait time, total cost of providing new material vice repair of unserviceable assets, and costs of managing and transporting returned assets.

C6.3.2.3. The DoD Components may establish routine procedures to return field-level reparable items to designated installation or operating-level maintenance activities.

C6.3.2.4. As changes in projected unserviceable return quantities or scheduled return times occur, planned maintenance requirements should be adjusted accordingly.

C6.3.2.5. For each reparable item, the IMM shall maintain an automated history of unserviceable returns by returning activity. Actual history shall be maintained for a period not less than 2 years, nor greater than 10 years.

C6.4. MATERIEL RETURNS PROGRAM FOR RETAIL ASSETS

C6.4.1. Requirements

C6.4.1.1. Except for Class I perishable subsistence and Class VIII medical shelf-life items, all serviceable assets or economically repairable assets above a DoD Component's retention limit at a retail supply activity shall be reported to the wholesale manager for a determination as to disposition. To guide the wholesale manager in making an economically viable decision on disposition, the DoD Components shall establish criteria, such as cost-to-process, cost-to-hold, and cost-to-ship. Based on that criteria, the wholesale manager shall advise the holding DoD Component to:

C6.4.1.1.1. Return the reported assets to wholesale stocks.

C6.4.1.1.2. Laterally redistribute the reported assets.

C6.4.1.1.3. Temporarily retain the assets in-place.

C6.4.1.1.4. Not return the reported assets as they are not authorized to be returned.

C6.4.1.2. Retail Class I perishable subsistence and Class VIII medical shelf-life assets are not authorized for return.

C6.4.1.3. As an alternative to procurement to satisfy operational requirements within the budget year, wholesale managers shall accept returned assets and provide a financial credit to the owning DoD Component. The financial credit provided for items authorized for return by the wholesale manager shall be the latest acquisition price.

C6.4.1.4. No credit shall be authorized for returns of assets beyond the budget year, or to satisfy the currently unfunded portion of the war reserve requirements.

C6.4.2. Procedures

C6.4.2.1. If serviceable assets of consumable and repairable items or unserviceable-but-economically-repairable assets of repairable items exceed the local retention levels at a retail supply activity, the holding DoD Component shall report as soon as practicable, but at least quarterly, those assets to the wholesale manager. Reports shall be for full unit-of-issue quantities only.

C6.4.2.2. Reported assets that the wholesale manager does not authorize for return or temporary retention shall be subject to the retail holding or disposal practices of the owning DoD Component. Unauthorized return of materiel may result in the IMM taking action to recoup from the returning activity the cost of all reimbursable actions the receiving activity performs (such as repackaging, marking, and/or disposal).

C7. CHAPTER 7

SUPPORTING TECHNOLOGIES

C7.1. SUPPLY CHAIN MATERIEL MANAGEMENT SYSTEMS

C7.1.1. Requirements

C7.1.1.1. The DoD Components shall implement and maintain modern logistics information systems and adopt proven new methods to manage information to:

C7.1.1.1.1. Provide a timely and complete process that satisfies DoD supply chain materiel management requirements.

C7.1.1.1.2. Coordinate planning and provide for a collaborative and interoperable environment among the DoD Components as well as with commercial partners and suppliers.

C7.1.1.1.3. Tailor support to operational conditions and mission requirements.

C7.1.1.1.4. Sustain support while minimizing systems support costs and duplicative efforts.

C7.1.1.2. Supply chain management information systems shall provide timely access to accurate, actionable information across logistics processes to enable real-time, protected logistics situational awareness and execution.

C7.1.1.3. The principal objective of supply chain materiel management systems modernization is to achieve desired operational performance and/or potential cost reduction. Therefore, all modernization initiatives shall be evaluated against that objective. Systems modernization or upgrade shall not be undertaken solely to acquire newer technological capabilities.

C7.1.2. Procedures. The DoD Components should:

C7.1.2.1. Develop and execute a supply chain data management strategy that promotes the use of shared common data.

C7.1.2.2. Implement an information exchange network to support coordination and collaboration between DoD supply chain functions and activities, including

commercial partners. Security mechanisms should be in place to provide for secure, un-compromised exchange of information.

C7.1.2.3. Wherever possible, adopt commercial data exchange and user interface standards and procedures while ensuring interoperability.

C7.1.2.4. Wherever possible, ensure concurrent availability of information required by supply chain participants to eliminate duplicate records and reconciliation.

C7.1.2.5. Participate fully in the development and implementation of the DoD common operating environment (COE). At a minimum, the COE supporting the DoD supply chain should have the following features:

C7.1.2.5.1. Authorized users can access information from any location transparently and independently of any process application.

C7.1.2.5.2. Functional applications are available on-line.

C7.1.2.5.3. Application-driven data calls are automated and facilitate machine-to-machine data sharing through common interfaces.

C7.1.2.5.4. Data access is timely and accurate.

C7.1.2.5.5. The supply chain COE facilitates concurrent automated workflow processing.

C7.1.2.5.6. A secure network ensures information integrity and restricts access to authorized individuals and activities.

C7.1.2.6. Adopt a strategy of using COTS supply chain management applications whenever such applications meet their mission requirements. ERP or equivalent strategies should be used to increase supply chain effectiveness and productivity.

C7.1.2.7. Seek opportunities for inter-DoD Component supply chain management systems development.

C7.1.2.8. Ensure that their materiel management systems collect and disseminate measures of performance and cost metrics that pertain to all organizational levels.

C7.1.2.9. Ensure that their materiel management systems interface with Planning, Programming, and Budgeting System processes to permit cross-referencing and analysis of resource requirements and availability.

C7.1.2.10. Provide automated access to computer-based standard training and state-of-the-art learning tools for supply chain managers.

C7.2. AUTOMATED IDENTIFICATION TECHNOLOGY (AIT)

C7.2.1. Requirements

C7.2.1.1. AIT is a family of technologies that improves the accuracy, efficiency, and timeliness of material identification and data collection. AIT media and devices include, but are not limited to, linear and two-dimensional bar code symbols and their readers, magnetic stripe cards, integrated cards (e.g., smart cards), optical memory cards (OMC), active and passive radio frequency identification (RFID), contact memory (button memory) devices, and magnetic storage media.

C7.2.1.2. The DoD Components shall:

C7.2.1.2.1. Consider AIT (machine-readable data) as the preferred system input/data collection method.

C7.2.1.2.1.1. Ensure information about materiel entering or moving through the DoD supply chain is in a format that is applicable for use by commercial and/or military AIT devices.

C7.2.1.2.2. Incorporate and maximize the use of machine-readable AIT media and data collection devices.

C7.2.1.2.3. Mark individual item assets according to procedures in paragraph C5.7.3., above, on unique item tracking.

C7.2.2. Procedures. Approved standards and specifications are preferred for AIT media, devices, and software. The minimal compliance is as following:

C7.2.2.1. Data syntax and semantics for all high-capacity AIT devices shall conform to the ISO/IEC 15434 and ISO/IEC 15418 standards (references (ap) and (aq)).

C7.2.2.2. RFID collection systems shall conform to the ANSI NCITS-256:2001 standard (reference (ar)) or later.

C7.2.2.3. Radio Frequency Local Area Networks (LANS) AIT devices shall conform to the IEEE 802.11 series of standards (reference (as)).

C7.3. SUPPLY CHAIN ANALYTICAL CAPABILITIES

C7.3.1. Requirements

C7.3.1.1. The DoD Components shall use analytical capabilities to evaluate and improve their future logistics enterprise's sizing and resource requirements and current supply chain performance and customer satisfaction.

C7.3.1.2. The major functions of analytical capabilities should include:

C7.3.1.2.1. Identifying and tracking deviations from projected goals for the metrics identified in section C1.3. and deviations from normal historical or projected patterns in such areas as demand, stock levels, lead times, repair cycles, order and ship times, retention stocks, or prices of materiel or services.

C7.3.1.2.2. Assessing costs to acquire, manage, and maintain materiel inventories and costs associated with supply chain operations and analyzing cost changes.

C7.3.1.2.3. Simulating proposed process changes or changes in force structure or operations to project their impact on supply chain performance and costs.

C7.3.1.2.4. Planning for materiel support to contingency and wartime operations.

C7.3.1.3. Although established models and techniques are preferable for reasons of quality and validity, the DoD Components are not limited to the models or techniques that they may use to develop analytical capabilities. All models and techniques that are used must produce results that are repeatable and verifiable.

C7.3.1.4. Typical outputs should do one or more of the following:

C7.3.1.4.1. Summarize key trends, identify out-of-tolerance conditions, project materiel shortfalls, or highlight other anomalies associated with basic performance or process sizing metrics.

C7.3.1.4.2. Track actual resource use by weapon system, equipment or supply chain activity and assess reallocation of available resources by weapon system on the basis of changes in priorities and conditions.

C7.3.1.4.3. Forecast readiness trends by weapon system, end equipment, or organization on the basis of current readiness posture or on the basis of potential changes to projected failures, commanders' future operational plans, and projected acquisition or maintenance production. For projected deficiencies, provide estimated get-well times.

C7.3.1.4.4. Provide material requirements planning information related to end-to-end movement from theater reception, staging, onward movement, and force integration capacity and constraints.

C7.3.1.4.5. Evaluated "what if" scenarios.

C7.3.2. Procedures. In developing analytical capabilities, the DoD Components should:

C7.3.2.1. Make use of existing information sources, including:

C7.3.2.1.1. Internal materiel management systems, maintenance information systems, existing data repositories (e.g., LMARS), operational systems tracking weapon system performance, and the product data repositories cited in section C7.4., below.

C7.3.2.1.2. External commercial repositories of supply chain benchmarks and metrics.

C7.3.2.2. Make use of simulation models, mathematical algorithms, expert systems, artificial intelligence techniques, spreadsheets, statistical packages, and statistical sampling; and ensure that users are trained in their use.

C7.4. PRODUCT SUPPORT DATA

C7.4.1. Requirements

C7.4.1.1. The DoD Components or a third party with guaranteed access shall collect and maintain product support data to ensure life-cycle sustainment and continuous improvement of product affordability, reliability, and supportability.

C7.4.1.1.1. Product support data consists of weapon system and equipment program, configuration, and performance data and technical manuals; weapon system reparable item test, failure, and usage data and repair manuals; and weapon system item support cost data. Product support data supplements item identification or catalog data managed under the provisions of section C8.1., below.

C7.4.1.1.2. Product support data should be retained in a manner consistent with the PBL support strategy developed during the weapon system, equipment, or reparable component acquisition phase.

C7.4.1.2. Product support data users should have online access to product support data, regardless of the geographical location of that data.

C7.4.2. Procedures

C7.4.2.1. To warehouse product support data where necessary, the DoD Components should provide for data repositories, data management systems, and related access capabilities. The data management system for product support data should control the technical baseline (e.g., configuration documentation, technical data, and technical manuals) for weapon systems and other equipment.

C7.4.2.2. The following are representative of product data access capabilities that should be provided access to:

C7.4.2.2.1. Weapon system program and force structure information in a secured mode.

C7.4.2.2.2. Technical and repair manuals to promote a flow of information among weapon systems managers and their suppliers and customers.

C7.4.2.2.3. Current component maintenance data to enable comparative analyses between actual and projected failure rates and costs.

C7.4.2.2.4. Engineering drawings and related maintenance procedures, maintenance planning data, maintenance resources, provisioning data, and field feedback data.

C7.4.2.2.5. Engineering change proposals for supply chain impact and coordinate implementation and use of technical documentation.

C7.4.2.3. The DoD Component shall provide the capability to exchange product support information with allies to enhance international interoperability and cooperation.

C8. CHAPTER 8

LOGISTICS PROGRAMS AND SYSTEMS

C8.1. CATALOGING

C8.1.1. Requirements

C8.1.1.1. The DoD Components shall use the Federal Catalog System as the uniform item identification process to provide differentiation, standardization, interchangeability, substitutability, and information exchange across the DoD Components, their commercial support providers, and other non-DoD Federal Departments and Agencies.

C8.1.1.1.1. According to 10 U.S.C. 2451 (reference (b)), each item recurrently used, bought, stocked, or distributed by the Department of Defense shall be cataloged. That cataloging includes naming and describing the item, classifying it, and assigning it one distinctive combination of letters or numerals, or both, that identifies it as the same item throughout the Department of Defense.

C8.1.1.1.2. For new items introduced as part of a new system acquisition, the acquisition Program Manager is responsible for ensuring that they are cataloged.

C8.1.1.2. Managed and operated by the DLIS, the Federal Logistics Information System (FLIS) shall be the single source of Federal cataloging and related logistics management data.

C8.1.1.2.1. The FLIS shall consist of a repository of item-identifying, item-related logistics management data and logistics data indices that are structured to be compatible with modern automated data processing and communications technologies used by the DoD Components.

C8.1.1.2.2. The DoD Components shall ensure that:

C8.1.1.2.2.1. Any item that they stock, routinely distribute, or repetitively buy and use is included in the FLIS.

C8.1.1.2.2.2. Any new item that is associated with the acquisition of a new end item is introduced in the FLIS as a part of provisioning for that end item.

C8.1.1.2.2.3. Any new item that is not involved in end item provisioning, such as a new item replacing an existing item or a locally purchased item substituting for an existing item, is introduced promptly into the FLIS.

C8.1.1.2.2.4. Each item included in the FLIS shall have a NSN that all supply functions from purchase to final disposal may use to identify the item. (Because the NSN is unique to an item and not unique to an individual unit or asset of an item, it can not be used for purposes of unique item tracking. For that purpose, other identifiers such as the individual unit's serial number may be used per subparagraph C5.7.3.2.8., above.)

C8.1.1.2.2.5. The number of new and common items entering the FLIS shall be minimized by using standardization, parts control, and item entry control processes that eliminate overlapping and duplicate specifications and reduce the number of sizes and kinds of items that are generally similar.

C8.1.1.3. The DoD Components shall provide to the DLIS item-identifying characteristics and other logistics management data, including information and identifying characteristics about hazardous components or substances contained in the item.

C8.1.1.3.1. The preparation of requests submitted for NSN assignment shall use item descriptions that distinguish one item from every other item. Those descriptions should include all known approved commercial/Government identifying numbers (such as drawing number, standard part numbers, and Universal Product Codes along with CAGE codes).

C8.1.1.3.2. Descriptive data for an item shall be maintained to support identification requirements and other logistics functions.

C8.1.1.3.3. Sources for item identifying information should be authoritative, including data from and use of contractor information systems and technical data resources.

C8.1.1.4. The item cataloging tasks shall be divided between the DoD Components and the DLIS.

C8.1.1.4.1. The DoD Components shall determine whether the Military Services, the DLA, the GSA, or commercial support providers shall manage items and provide that information, along with all other information needed to catalog an item, to the DLIS.

C8.1.1.4.2. The DLIS shall be responsible for all other cataloging tasks, which involve NSN assignment and the maintenance and dissemination of item information needed for supply operations, such as descriptive and performance data, size, weight, cubage, packaging and packing data, a standard quantitative unit of measurement, and other data deemed necessary.

C8.1.1.5. The FLIS shall be the single system through which users access, maintain, store, and retrieve Federal cataloging information related to an item of supply, with the exception of nuclear items and certain items related to the United States Special Operations Command (USSOCOM).

C8.1.1.5.1. The FLIS shall provide system users online and World Wide Web access to a virtual catalog of FLIS data records regardless of the geographical location of the data.

C8.1.1.5.2. The FLIS shall maintain the capability to provide users with accurate and timely logistics data made available in multiple media (e.g., on-line, Compact Disk - Read Only Memory (CD-ROM); Digital Video Disk (DVD); etc.) as required by the users.

C8.1.1.5.3. The DoD Components shall make maximum use of on-line cataloging tools outlined in DoD 4100.39-M (reference (at)). DoD Component-owned systems should be configured so as to support the FLIS.

C8.1.1.6. Managed and operated by the Defense Threat Reduction Agency, the Nuclear Ordnance Cataloging Office (NOCO), an agent of the DLIS, is responsible for the managing and operating the secure Nuclear Inventory Management and Cataloging System (NIMACS) for nuclear ordnance items and peculiar items of the USSOCOM.

C8.1.1.7. United States participation in the North Atlantic Treaty Organization (NATO) Codification (Cataloging) System shall be under the provisions of Standardization NATO Agreements 3150 and 3151, and the Allied Codification Publication (references (au) through (aw)).

C8.1.2. Procedures

C8.1.2.1. When introducing new secondary items to the FLIS, the DoD Components shall ensure that they are classified as "consumable," "field-level reparable," or "depot-level reparable" items and assigned appropriate SMR codes, as stated in subparagraph C2.2.2.1.3., above.

C8.1.2.2. The Director, DLA, through the Commander, DLIS, shall administer the Federal Catalog System and the FLIS and shall develop, coordinate, and maintain detailed FLIS guidance in DoD 4100.39-M (reference (at)).

C8.2. NEW CLOTHING AND TEXTILE ITEMS

C8.2.1. Requirements

C8.2.1.1. The introduction of new clothing and textile items into the DoD supply system, as a result of proposed DoD Component action, shall be planned and coordinated with the DLA to ensure optimal economic use of all existing stocks of affected items.

C8.2.1.2. Clothing and textile items should be subject to the highest degree of standardization possible while preserving the distinctiveness necessary to maintain high morale in the Military Services and essential for continued combat readiness and effectiveness. The variety of items shall be minimized, consistent with effective support of military operations. In all cases where no compelling military requirement exists for deviating from commercial specifications for a clothing or textile item, the using DoD Components shall adopt the commercial specification.

C8.2.2. Procedures

C8.2.2.1. Research, Development, Test and Engineering (RDT&E) efforts associated with clothing and textile development shall be coordinated to facilitate item standardization among the DoD Components when standardization may be achieved without jeopardizing the DoD Components' ability to maintain combat readiness or accomplish their missions.

C8.2.2.1.1. Such coordination shall:

C8.2.2.1.1.1. Include the maximum participation of potential users during the development and execution of test plans.

C8.2.2.1.1.2. Provide for integration and consolidation of development efforts where applicable.

C8.2.2.1.1.3. Provide the DLA with advance planning information on items that are candidates for introduction into the DoD supply system.

C8.2.2.1.2. When RDT&E projects on clothing and textile items that are subject to standardization reach the advanced development or engineering development phase:

C8.2.2.1.2.1. The initiating DoD Component shall formally coordinate with the other DoD Components.

C8.2.2.1.2.2. The DoD Components that receive requests for formal coordination shall review the development and/or test plan and formally provide any additional requirements that they desire.

C8.2.2.1.2.3. The DLA shall inform all interested DoD Components of any existing items that may satisfy the stated requirement.

C8.2.2.2. After the initiating DoD Component completes developing a proposed new item and is satisfied that it will meet the requirements of potential users, the DLA shall coordinate the proposal with each potential user before final adoption of the item.

C8.2.2.2.1. When applicable, proposals should address the cost considerations, phasing schedules, and budgetary issues associated with new item introductions.

C8.2.2.2.2. When the new item is a replacement clothing item, the initiating DoD Component shall prepare a phase-in schedule for the new item and an inventory reduction plan for residual stocks of the old item while the new item is being procured.

C8.2.2.2.2.1. The DLA shall evaluate the DoD Component proposals introducing new items to determine the effect that the scheduled introduction of a new item will have on existing wholesale and retail stocks.

C8.2.2.2.2.2. The Director, DLA, shall advise the DUSD(L&MR), either initially or during the introduction process, when the residual wholesale and retail stocks of both the end item and the constituent textiles are estimated to exceed \$1 million in value on the effective date of supply of the new item.

C8.2.2.2.3. The DLA shall concur with DoD Component proposals or recommend alternatives for introduction dates and the length of time required to get funds for the initial procurement of each new item.

C8.2.2.2.4. The DUSD(L&MR) shall review the item proposals and recommendations of the DoD Components when necessary to resolve differences and make final decisions.

C8.2.2.2.5. For new clothing items with a forecasted total annual demand value (recurring and non-recurring) for the generic item (all sizes) exceeding \$100,000, the initial investment and the acquisition of inventory levels required to satisfy demands up to the effective date of supply is the financial responsibility of the DoD Component that is requesting the new item.

C8.2.2.2.5.1. New items requests that carry financial responsibility are:

C8.2.2.2.5.1.1. An initial introduction.

C8.2.2.2.5.1.2. A change in use that will increase the quantities required.

C8.2.2.2.5.1.3. Use of the item by a Military Service that was not formerly using the item. A DoD Component does not incur any financial responsibility if it is using an item and decides to use an additional size that is currently being used by one or more other DoD Components and requires no change to allow for the expanded usage.

C8.2.2.2.5.2. The Military Service(s) with the requirement for a new clothing or textile item with a forecasted total annual demand value (recurring and non-recurring) for the generic item (all sizes) exceeding \$100,000 must submit a funded order to the DLA to cover the cost of acquiring a sufficient quantity of the articles, including approved safety levels, to satisfy anticipated demand until delivery may be expected from the second contract for the item. The DLA shall not order the item until such funding is received.

C8.2.2.2.5.3. Billings presented to the Military Services for the costs of new item introduction shall include an offset for the value of the items being replaced to the extent that the timing of the introduction of the new items is deferred sufficiently to provide for the sale of existing inventory. That offset may be adjusted to provide for any costs or income associated with disposal of the items being replaced.

C8.2.2.3. Working capital funds may be used to procure and stock optional uniform clothing items in the DoD supply system for sale to military retail clothing sales stores for resale to individual Military Service members. Optional uniform

clothing items are defined as those items that are authorized for wear by members of the Military Services when bought with their personal funds, but are neither supported by the Armed Forces Clothing Monetary Allowance, nor required as part of a prescribed duty uniform. The Military Services shall:

C8.2.2.3.1. Notify the DLA when an optional uniform clothing item is authorized, but is to be introduced only through the Military Exchange Systems or other sources of supply.

C8.2.2.3.2. Ensure that the Military Exchange Systems notify the DLA before introducing any optional uniform clothing that is equivalent to a standard item stocked in the DoD supply system.

C8.2.2.4. These standardization guidelines are established for use during the development and introduction of new items:

C8.2.2.4.1. Clothing items, including combat, field, fatigue, special purpose clothing, underwear, and individual equipment should be standardized insofar as functionality, maintenance of combat readiness, and mission accomplishment permit. Any desired distinctiveness should be obtained by using separate items of insignia, and patches; etc.

C8.2.2.4.2. Blankets, towels, bedspreads, table linen, and other items in Federal Supply Class 7210, "Household Furnishings," shall be standardized except in cases of justifiable differences. Distinctive markings that may prevent standardization shall not be used.

C8.2.2.4.3. The DoD Components should actively seek to reduce costs by standardization of basic materials and accessories.

C8.3. SPARE PARTS BREAKOUT PROGRAMS

C8.3.1. Requirements

C8.3.1.1. The Department of Defense shall reduce the costs of spare parts by using competitive procurement methods, or purchasing parts directly from the actual manufacturer, rather than the prime contractor, while maintaining the integrity of the systems and equipment in which the parts are to be used.

C8.3.1.2. Spare parts breakout programs apply to centrally managed (IMM) replenishment parts for military systems and equipment.

C8.3.2. Procedures

C8.3.2.1. The DoD Components shall establish and implement spare parts breakout programs to determine the feasibility of acquiring centrally managed replenishment parts by competitive procedures or direct purchase from actual manufacturers.

C8.3.2.2. The identification, selection, and screening of centrally managed replenishment parts for breakout shall be made as early as possible to determine the technical and economic considerations of the opportunities for breakout to competition or direct purchase.

C8.3.2.3. A part shall be made a candidate for breakout screening based on its cost effectiveness for breakout. Resources should be assigned and priority given to those parts with the greatest expected return.

C8.4. PRICE CHALLENGE AND PRICE VERIFICATION PROGRAMS

C8.4.1. Requirements

C8.4.1.1. All DoD personnel shall be alert to possible overpricing of materiel. Price challenge and price verification programs shall be established and made available to all DoD personnel, as well as employees of contractors doing work for the Department of Defense.

C8.4.1.2. A prompt and adequate assessment shall be made of reported instances of suspected price discrepancies and action taken as necessary to resolve overpricing or overcharging.

C8.4.2. Procedures

C8.4.2.1. Price inquiries include price verification requests and price challenges. Price verification requests involve clear price discrepancies (between a catalog price and a billing price, contract price, or prior catalog price). Inquiries on non-stocked items should be processed as verification requests. Price challenges shall provide specific detailed information indicating potential overpricing meriting an in-depth review.

C8.4.2.2. The reviewing activity for price inquiries is the IMM or the contracting officer associated with a commercially managed item. The reviewing

activity should report the results of a review of price verification requests, and the determination of a price challenge whether overpricing occurred, within 30 and 90 days of receipt, respectively. In making a determination, the reviewing activity should, at a minimum, review existing contract histories to determine if an unusual and unexplained increase in price has occurred.

C8.4.2.3. Price reductions and/or refunds in cases of contractor overpricing shall be pursued aggressively through contractual and/or voluntary remedies.

C8.4.2.4. The process of updating FLIS data to correct the standard price should be initiated within 15 days of a determination of an erroneous price.

C8.4.2.5. Price inquiries for either price challenges or price verification requests shall include, to the maximum extent possible, this information:

C8.4.2.5.1. NSN or its subcomponent National Item Identification Number (NIIN) (if unavailable or a non-NSN item, provide CAGE code and part number).

C8.4.2.5.2. Approved item name (if unavailable or unknown, provide common nomenclature).

C8.4.2.5.3. Catalog or other unit price questioned.

C8.4.2.5.4. Source of unit price questioned.

C8.4.2.5.5. Requisition number.

C8.4.2.5.6. Contract number, if available (essential for part number inquiries).

C8.4.2.5.7. Point of contact's name, office symbol or code, address, telephone number (both Defense Switched Network and commercial), and email address (if available).

C8.4.2.6. Besides the information required in subparagraph C8.4.2.5., above, submission of a price challenge should include substantial evidence that the item is significantly overpriced such as the following:

C8.4.2.6.1. The manufacturer (either by CAGE code or address and telephone number, part numbers, and unit prices) for these cases:

C8.4.2.6.1.1. An I&S item (i.e., same form, fit, and function) with significantly lower price.

C8.4.2.6.1.2. A similar or equivalent item (i.e., comparable size and function) with a significantly lower price.

C8.4.2.6.1.3. An alternate source with significantly lower price.

C8.4.2.6.2. Any disparity between kit price or other end item price and component item prices.

C8.4.2.6.3. Evidence of overpricing in connection with a specific procurement within the last 5 years.

C8.4.2.6.4. The challenger's estimate of what the price should be, along with a justification for the estimate.

C8.4.2.6.5. The end item application or intended item use, if known.

C8.4.2.6.6. If available, a sample of the item (broken or used; etc.); otherwise, a drawing, photograph, or sketch, if possible.

C8.5. DoD AVIATION CRITICAL SAFETY ITEM (CSI)/FLIGHT SAFETY CRITICAL AIRCRAFT PART (FSCAP) PROGRAM

C8.5.1. Requirements

C8.5.1.1. The Department of Defense shall identify and control Aviation CSI/FSCAPs (see Appendix 1 for definition) throughout their life cycle to ensure only safe parts are installed on military aircraft or are released to the civil aircraft market through disposal sales, exchanges or other authorized transfers of DoD parts.

C8.5.1.2. The cognizant ESA shall establish the criticality determinations for each new item. Materiel Managers shall validate that the criticality determination has been accomplished during provisioning and/or during any design change that affects the item. For common use items, criticality determinations shall be coordinated with the other using ESAs to ensure the most critical application is properly reflected in the determination.

C8.5.1.3. The Department of Defense shall develop a criticality code structure to identify Aviation CSI/FSCAP items to ensure proper life-cycle management of items

critical to aviation safety and to ensure that used Aviation CSI/FSCAP items are mutilated if they are being disposed of without historical maintenance records. Loans, gifts, and exchanges made under 10 U.S.C. 2572 (reference (b)) that involve Aviation CSI/FSCAPs shall be accomplished according to DoD 4160.21-M and DoD 4160.21-M-1 (references (ag) and (al)).

C8.5.2. Procedures

C8.5.2.1. Aviation CSI/FSCAPs shall be identified in the FLIS by an applicable criticality code.

C8.5.2.2. Only the inventory control point (ICP) having management responsibility for an item may designate it as "Aviation CSI/FSCAP" in the FLIS.

C8.5.2.3. If the Military Services desire to have an item they do not manage designated Aviation CSI/FSCAP, they shall coordinate the request with the managing ICP.

C8.5.2.4. The DoD Components shall designate an aircraft airworthiness authority who has design and configuration cognizance. During the acquisition of a Aviation CSI/FSCAP, any change of design or configuration shall require the concurrence of the designated authority.

C8.5.2.5. The acquisition specifications for Aviation CSI/FSCAP shall have this notification on the title page: "This specification is for an Aviation Critical Safety Item (CSI)/Flight Safety Critical Aircraft Part (FSCAP) and acquisition process must comply with the DoD Materiel Management Regulation - DoD 4140.1-R."

C8.5.2.6. Where practical, reparable Aviation CSI/FSCAPs shall be managed and tracked throughout their life cycle by serial number.

C8.5.2.7. The minimum documentation requirements for used Aviation CSI/FSCAPs are:

C8.5.2.7.1. Part identification-part number, NSN, and, for reparable Aviation CSI/FSCAPs, serial number.

C8.5.2.7.2. Manufacturer, CAGE code, and date of manufacture.

C8.5.2.7.3. Total time in service.

C8.5.2.7.4. Current status for life-limited parts.

C8.5.2.7.5. Time since the last overhaul of each part that is required to be overhauled on a specified time basis.

C8.5.2.7.6. Identification of current inspection status, including time since last required inspection or maintenance performed.

C8.5.2.7.7. Current status of applicable FAA airworthiness directive (AD) or DoD equivalent technical orders, including the date and method, and if the AD involves recurring action, time, and date when the next action is required.

C8.5.2.7.8. A list of current major alterations, repairs or modifications for each part including date that work was done and work authentication.

C8.5.2.8. The minimum documentation requirements for new Aviation CSI/FSCAPs are:

C8.5.2.8.1. Part identification-part number, NSN, and, for reparable Aviation CSI/FSCAPs, serial number.

C8.5.2.8.2. Manufacturer, CAGE code, and date of manufacture.

C8.5.2.9. All historical documentation shall go with individual Aviation CSI/FSCAP items when they are shipped to another user, to maintenance, or to a Defense Reutilization and Marketing Office (DRMO) for disposal.

C8.5.2.10. The DUSD(L&MR) shall establish and maintain Aviation CSI/FSCAP policy and ensure DoD Component compliance with that policy.

C8.5.2.11. The DoD Components shall:

C8.5.2.11.1. Incorporate the standard DoD Aviation CSI/FSCAP definition in their DoD Regulations, Directives, and Instructions.

C8.5.2.11.2. Establish a process for identifying Aviation CSI/FSCAP consistent with the DoD definition.

C8.5.2.11.3. Identify and assign a criticality code to all Aviation CSI/FSCAP parts or components during the provisioning process.

C8.5.2.11.4. Ensure that drawings and associated technical data clearly identify the item as Aviation CSI/FSCAP. Drawings and technical data shall identify the

critical and major characteristics, critical processes and inspection and other quality assurance requirements for all Aviation CSI/FSCAP.

C8.5.2.11.5. Identify approved/qualified sources of supply or repair/overhaul for each Aviation CSI/FSCAP at the time the criticality determination is made or as soon after as practical.

C8.5.2.11.6. Identify and code parts and components meeting the Aviation CSI/FSCAP definition during the acquisition process and ensure that:

C8.5.2.11.6.1. They are acquired only from sources approved by the ESA and only to the technical requirements established by the ESA.

C8.5.2.11.6.2. Acquisition Method coding reflects criticality determination and that any change to a less restrictive code be approved by the cognizant ESA.

C8.5.2.11.7. Update current cataloging data for existing NSNs to identify Aviation CSI/FSCAP items.

C8.5.2.11.8. Validate criticality determination during any subsequent design change that affects the item.

C8.5.2.11.9. Ensure that responses to engineering support requests with regard to Aviation CSI/FSCAP are accurate, timely, and completed with the concurrence of the designated air worthiness authority.

C8.5.2.11.10. Manage and track serialized Aviation CSI/FSCAP items throughout their life cycle within the Department of Defense.

C8.5.2.11.11. Ensure that information on critical (design and acquisition) characteristics are communicated to the ICP in an acquisition specification (technical data package) that summarizes the design, engineering management and acquisition requirements necessary for the successful acquisition of Aviation CSI/FSCAP items.

C8.5.2.11.12. Ensure that when turning Aviation CSI/FSCAP materiel into a DRMO, the proper criticality code is assigned according to DoD 4100.39-M (reference (at)) and the historical records accompany the property.

C8.5.2.11.13. Ensure that improperly documented, defective, non-repairable, and time-expired Aviation CSI/FSCAP are mutilated by the holding activity or the DRMO prior to disposal, exchange, or transfer outside of the Department

of Defense. When turning such Aviation CSI/FSCAP in to a DRMO, ensure that the turn-in documents clearly annotated that the part is "defective," "non-reparable," or "time-expired" and that mutilation is required.

C8.5.2.11.14. When available, request, obtain, and maintain the FAA Form 8130-3, "Airworthiness Approval Tag," from the original equipment manufacturer.

C8.5.2.11.15. According to transportation regulations concerning the preparation of shipment documentation, ensure that historical maintenance documentation and/or the FAA Form 8130-3 are included for all Aviation CSI/FSCAP items that are shipped from one DoD Component to another or turned in to the DRMO.

C8.5.2.12. The DLA shall:

C8.5.2.12.1. Institute a process to obtain data necessary for the life-cycle management and sale of the Aviation CSI/FSCAP from the cognizant ESA to include, as a minimum, the documentation defined in paragraph C8.5.2.7., above, as well as the information necessary for the successful acquisition of Aviation CSI/FSCAP items.

C8.5.2.12.2. Provide executive direction and control to ensure Aviation CSI/FSCAP procedures are followed and that disposal is administered under all legal and regulatory requirements.

C8.5.2.12.3. Ensure engineering support is requested for all Aviation CSI/FSCAP items during the acquisition process when design changes, waivers, and deviations are involved.

C8.5.2.12.4. Incorporate procedures in DoD 4160.21-M (reference (ag)).

C8.5.2.12.5. Verify that Aviation CSI/FSCAP items entering the property accounts of the DRMOs are mutilated if the items are lacking the documentation cited in subparagraphs C8.5.2.7.1. through C8.5.2.7.8., above (for used items), or subparagraphs C8.5.2.8.1. through C8.5.2.8.2., above (for new items).

C8.5.2.12.6. Require as a condition of transfer, donation, or sale of an Aviation CSI/FSCAP item to an agency or person(s) outside of the Department of Defense that these stipulations shall be met:

C8.5.2.12.6.1. All public agencies, organizations, or person(s) that acquire or receive an Aviation CSI/FSCAP item are responsible for maintaining historical maintenance documentation.

C8.5.2.12.6.2. Should additional operational use of an Aviation CSI/FSCAP item occur after transfer, the using agency is responsible for updating historical records to reflect additional use and maintenance.

C8.5.2.12.6.3. The using agency is responsible for maintaining the Aviation CSI/FSCAP item and providing the information described in subparagraph C8.5.2.7., above.

C8.5.2.12.6.4. When an Aviation CSI/FSCAP item is no longer required, the donee of an Aviation CSI/FSCAP item shall certify to the DLA that all requirements for transfer have been met before subsequent transfer. When the Aviation CSI/FSCAP item is determined to be unsalvageable, the part shall be mutilated and properly disposed of.

C8.6. MANAGEMENT OF LOGISTICS STANDARD SYSTEMS AND DATA

C8.6.1. Defense Logistics Management System (DLMS)

C8.6.1.1. Requirements. The DoD Components shall support and maintain the DLMS to interpret, prescribe, and implement DoD supply chain management policy in the functional areas of supply, transportation, acquisition (contract administration), maintenance, and finance.

C8.6.1.1.1. The DLMS shall be the primary system governing logistics functional business management standards and practices and shall provide a functional infrastructure for establishing and maintaining procedural guidelines required for its user community.

C8.6.1.1.2. The DLMS shall use ANSI ASC X12 EDI transactional interfaces and shall encompass emerging electronic business capabilities such as: data sharing, automatic identification technology, object oriented user interfaces, electronic malls, web-based technologies, and electronic fund transfers, as appropriate.

C8.6.1.1.3. The DLMSO shall provide configuration management for all changes to logistics business processes irrespective of the technology employed or functional area. The DLMS shall be implemented as prescribed by DoD 4000.25-M (reference (x)).

C8.6.1.1.4. The Defense Logistics Standard Systems (DLSS) shall be deactivated upon DoD-wide implementation of the DLMS.

C8.6.1.1.5. The DoD Components shall use approved electronic communications standards and supporting implementation conventions for DoD logistics business transactional data exchange, as directed by DoD Directive 8190.1 (reference (ay)). If provided, DLMS Supplements to the Federal implementation conventions shall be employed as a source for business rule guidance and transition strategy.

C8.6.1.1.6. The DLMS shall be the basis for new, replacement, and major modifications to logistics business processes/systems. The DLSS shall not be used for new, replacement, and major modifications to logistics business processes/systems.

C8.6.1.1.7. The Defense Automatic Addressing System Center (DAASC) shall provide conversion services (DLMS to DLSS and DLSS to DLMS) until all DoD Components have implemented approved commercial standards and business processes and these corporate conversion services are no longer needed.

C8.6.1.1.8. The DAASC is designated as the corporate community service provider for DLMS. In this capacity, the DAASC shall provide telecommunications support, archiving and storage, translation services, ASC X12/DLSS conversion processes, and other services to support DoD Component supply chain management systems and DLMS implementation.

C8.6.1.1.9. The DAASC shall be the logistics community's authoritative repository for end-to-end performance metrics.

C8.6.1.1.10. When available, the DoD Components shall use the corporate services the DLMSO and the DAASC provide for all logistics business system processing or, if not supported, submit the appropriate requirements to the DLMSO.

C8.6.1.1.11. The following DLSS procedures, codes, systems, reports, and directories and their associated DoD Manuals shall be maintained and used with the DLSS pending their complete transition into the DLMS:

C8.6.1.1.11.1. Military Standard Requisitioning and Issue Procedures (MILSTRIP) in DoD 4000.25-1-M (reference (r)).

C8.6.1.1.11.2. MILSTRIP Routing Identifier and Distribution Codes in DoD 4000.25-1-S1 (reference (az)).

C8.6.1.1.11.3. Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP) in DoD 4000.25-2-M (reference (g)).

C8.6.1.1.11.4. Military Standard Contract Administration Procedures (MILSCAP) in DoD 4000.25-5-M (reference (ba)).

C8.6.1.1.11.5. Military Standard Billing System (MILSBILLS) in DoD 4000.25-7-M (reference (y)).

C8.6.1.1.11.6. Fund Code Supplement to MILSBILLS in DoD 4000.25-7-M-S-1 (reference (bb)).

C8.6.1.1.11.7. Supply Discrepancy Report (SDR) in AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55.¹⁰

C8.6.1.1.11.8. Department of Defense Activity Address Directory (DoDAAD) in DoD 4000.25-6-M, Parts I through III (references (t) through (v)).

C8.6.1.1.11.9. Military Assistance Program Address Directory (MAPAD) in DoD 4000.25-8-M (reference (w)).

C8.6.1.1.11.10. Defense Automatic Addressing System (DAAS) in DoD 4000.25-10-M (reference (bc)).

C8.6.1.2. Procedures

C8.6.1.2.1. The DLMS and the DLSS DoD Manuals shall be published electronically. The DoD Components or other organizations may issue supplemental procedures when additional detailed instructions are required and made available to the DLMSO.

C8.6.1.2.2. The following govern the conversion of the DLSS to the DLMS:

¹⁰ Joint issuance AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55, "Reporting of Supply Discrepancies," August 6, 2001, can be found at website <http://www.dlaps.hq.dla.mil/dlai/i4140.55.htm>.

C8.6.1.2.2.1. The DoD Components shall incrementally implement the DLMS using approved schedules. Until, such time as the DLMS is fully implemented, conversion of the DLSS to the DLMS and, the DLMS to the DLSS, shall be accomplished using the conversion and translation capabilities of the DAASC. Other electronic forms will also use these DAASC capabilities. The DAASC shall coordinate all non-DLSS/DLMS requirements with the DLMSO.

C8.6.1.2.2.2. The DoD Components shall route all DLSS/DLMS transactions to the DAAS for edit, validation, and routing to correct recipient(s). Collected data shall also be used by the DAASC to support Combatant Commands and DoD Component logistics end-to-end performance metric analysis reporting requirements. Priority shall be given to the development and implementation of joint or inter-DoD Component procedures before separate development of intra-DoD Component procedures.

C8.6.1.2.2.3. The DoD Components shall uniformly implement the DLMS between DoD Components, and at all organizational levels within each DoD Component.

C8.6.1.2.3. All data elements employed in the DLMS that have not been standardized under DoD Directive 8320.1 (reference (bd)) shall be standardized as DoD logistics standards. Available DoD Logistics Standard Data Elements shall be used in the design and upgrading of DoD-wide and inter-DoD Component automated logistics systems.

C8.6.1.2.4. Functional and technical requirements for enhancement or revision of the DLMS shall be completely defined and documented. Recommended revisions to the DLMS shall be coordinated with the DoD Components, affected Federal Agencies, foreign governments, and industrial organizations, as required, and shall provide at a minimum the following information:

C8.6.1.2.4.1. Narrative description of the basic concept being proposed and reason therefore.

C8.6.1.2.4.2. Known interface and impact requirements with other standard logistics systems.

C8.6.1.2.4.3. Operational statement identifying known advantages and disadvantages resulting from the proposed revision, such as support of the Defense Information Infrastructure COE and the Global Combat Support System (GCSS).

C8.6.1.2.4.4. Proposed wording required for the DLMS publication or other DoD publications impacted by the DLMS proposal.

C8.6.1.2.5. The DLMSO, with affected DoD Components and Federal Agencies, shall schedule approved revisions for implementation. Urgent revisions shall be implemented on a priority basis.

C8.6.1.2.6. The DLMSO shall coordinate implementation dates for approved revisions with all DoD Components, affected Federal Agencies, foreign governments, and industrial organizations, as required, or as directed by the OSD. When joint revision proposals are coordinated, one of the system or program focal points shall be designated as the office of primary responsibility for preparing the joint response.

C8.6.1.2.7. The DoD Components shall use the DLMS procedures when undertaking the development of new, or revision of, existing logistics systems. If revisions to the existing DLMS are desired to accommodate technical innovations planned for new system designs, applicable DLMS change proposals shall be submitted with full justification, documentation, and explanation of the intended use.

C8.6.1.2.8. DLMS and DLSS responsibilities are further described in Appendix 13.

C8.6.2. DoD Logistics Data Administration and Management

C8.6.2.1. Requirements. The DoD Components shall implement data administration policies and procedures aggressively in ways that provide clear, concise, consistent, unambiguous, accurate, up-to-date, and easily accessible data DoD-wide, thereby minimizing the cost and time required to transform, translate, or research different-appearing, but otherwise identical data.

C8.6.2.1.1. DoD 4000.25-M (reference (x)) shall establish the DoD Logistics Data Administration and Management Program in full compliance with DoD Directive 8320.1 (reference (bd)). Accordingly:

C8.6.2.1.1.1. All logistics data elements shall be standardized as DoD logistics standard data elements. Data elements shall be standardized and registered to meet the requirements for data sharing and interoperability, between and among logistics information systems.

C8.6.2.1.1.2. Applicable DoD, Federal, national and international standards shall be used before creating new DoD logistics standards. Standard data elements shall be used in the design and upgrade of all intra-/inter-DoD Component automated logistics systems.

C8.6.2.1.1.3. The DLMSO, with all DoD Components, shall promote standardization of logistics data elements within the DoD logistics community, consistent with requirements for sharing data.

C8.6.2.1.1.4. The DoD Components shall implement the logistics community approach to managing data as a corporate asset and as a critical element in accomplishing the logistics mission.

C8.6.2.1.1.5. The DLMSO shall establish the roles and responsibilities for managing logistics data at all organizational levels including, but not limited to, the role of the DoD Logistics Functional Data Administrator (FDAd).

C8.6.2.1.2. The DLMSO shall, with the DoD Components, augment and amplify DoD data administration requirements and procedures to support the Future Logistics Environment, Focused Logistics, Information Fusion, and the GCSS vision of interoperability.

C8.6.2.1.3. The DLMSO shall develop and publish appropriate operational guidance for all DoD Components and information technology (IT) support elements that provide, maintain, or use logistics data to perform logistics-related activities.

C8.6.2.2. Procedures. The DoD Components shall implement the procedures below for providing, maintaining, or using logistics data.

C8.6.2.2.1. The DoD Logistics FDAd, with participating DoD Components, shall:

C8.6.2.2.1.1. Resolve data sharing issues, as required.

C8.6.2.2.1.2. Evaluate the status of data management, including data interoperability, in logistics IT initiatives.

C8.6.2.2.1.3. Establish and maintain a capability for providing community-wide information about the logistics data infrastructure and the relationships to other IT elements.

C8.6.2.2.1.4. Develop and publish implementation memoranda for logistics data management.

C8.6.2.2.1.5. Ensure configuration management is used for global logistics data assets.

C8.6.2.2.1.6. Coordinate with other functional areas to identify data interoperability opportunities.

C8.6.2.2.1.7. Ensure appropriate security requirements are identified for shared logistics data assets.

C8.6.2.2.1.8. Facilitate resolution of cross-component and cross-functional data quality issues.

C8.6.2.2.2. The DoD Component Logistics FAd's shall:

C8.6.2.2.2.1. Provide functional representation in joint logistics efforts involving data.

C8.6.2.2.2.2. Prepare and submit proposed standard data elements.

C8.6.2.2.2.3. Coordinate proposed standard data elements received from the DoD Component data administrators and the DoD Logistics FAd.

C8.6.2.2.2.4. Plan for utilizing and enhancing the interoperable data infrastructure.

C8.6.2.2.2.5. Determine the mission requirements for synchronization of replicated data within the DoD Component.

C8.6.2.2.2.6. Ensure that the DoD Component IT initiatives use the shared, authoritative data store.

C8.6.2.2.2.7. Ensure configuration management is used for non-global logistics data assets for which the DoD Component is responsible.

C8.6.2.2.2.8. Designate and record the authoritative store for logistics data.

C8.6.2.2.2.9. Ensure that data security requirements, including access permissions, are defined and effectively executed.

C8.6.2.2.2.10. Identify and investigate data quality issues and facilitate actions to improve processes in order to resolve these issues.

C8.6.2.2.2.11. Ensure that global logistics data assets of interest to the DoD Component are mapped to the common reference model.

C8.6.2.2.2.12. Ensure that the design of data acquisition and maintenance processes support the requirements of data interoperability and data quality.

C8.7. PACKAGING

C8.7.1. Requirements. The DoD Components shall:

C8.7.1.1. Preserve, package, and mark materiel for storage and movement in a way that provides adequate and quality protection, at the most economic cost, until ultimate consumption by the user.

C8.7.1.2. Use commercial packaging when it is cost effective and will withstand anticipated logistics conditions.

C8.7.1.3. Specify packaging requirements to prevent needless repackaging and/or upgrading of packaging.

C8.7.1.4. Base packaging upon the nature of the item, known or anticipated logistics requirements, and economic or normal consumer order quantities.

C8.7.1.5. Continuously improve DoD packaging specifications based on reviews of materiel order and issue quantities, cost of the item itself versus the cost to package, hazardous materiel packaging requirements, preservation and marking, storing and transporting the item, and its criticality to the end-user's weapons system or mission.

C8.7.1.6. Incorporate environmental pollution prevention measures into packaging standards, specifications, and other instructions and processes. The design and selection of packaging materials shall include consideration of disposability, reuse, biodegradability (when it meets logistics needs), recycling, and conservation.

C8.7.1.7. Develop where required, apply, issue, and document in accessible databases packaging requirements, in their assigned areas, for DoD-wide retrieval and application. Packaging requirements for items could be commercial standards or, if those are inadequate, military standards. Packaging requirements for reparable items

shall provide protection against damage and deterioration in retrograde operations and should be easily retrieved for guidance in item repacking upon repair or upgrading.

C8.7.1.8. Develop and apply uniform in-the-clear and machine-readable marking requirements per the latest version of MIL-STD-129,¹¹ to facilitate safe handling and efficient receipt, storage, and shipment of materiel.

C8.7.1.9. Package and mark hazardous materials according to applicable Federal and international regulations.

C8.7.1.10. Ensure that reusable containers are effectively used in applications where materiel is routinely returned for rebuilding or servicing.

C8.7.2. Procedures

C8.7.2.1. The DoD Components shall package materiel to provide adequate and quality protection at a fair and reasonable cost and to ensure efficient and cost-effective handling. The DoD Components shall use packaging designed to accommodate unitized or containerized loading and handling when it results in overall economy. The DoD Components also shall encourage commercial suppliers to apply similarly stringent packaging by using contract terms or other appropriate means.

C8.7.2.2. In developing the packaging and marking requirements for an item throughout its life cycle, the nature of the materiel, its reparability, the anticipated logistics environment (e.g., shipping, handling, transportation, length, and type of storage) it will encounter, and consideration of the consequences of the receipt of damaged materiel shall determine the type and extent of preservation, packaging and marking required.

C8.7.2.3. The DoD Components shall use common definitions for the levels of protection used for materiel. Those levels are explained in Appendix 14.

C8.7.2.4. The DoD Components shall accept commercial packaging when such packaging is cost-effective and the technical details of the package construction and test performance criteria, as noted in ASTM 3951,¹² show that the package will withstand the logistics conditions.

¹¹ See URL <http://www.dscc.dla.mil/offices/packaging/specstdslist.html>.

¹² See URL <http://www.dscc.dla.mil/offices/packaging/specstdslist.html>.

C8.7.2.5. In the absence of specific contract requirements, commercial packaging shall provide protection and preservation for the safe delivery of the item to the shipping destination and for storage at destination in enclosed facilities. Extraordinary preservation requirements shall be contractually specified, in advance of each contract award. Safe delivery shall be deemed to mean no damage to the contents of the package. Damage to the packaging is permissible if the integrity of the package remains sufficient to permit reasonable handling and storage at destination.

C8.7.2.6. MIL-STD-2073-1 (latest version¹³) is to be required only when adequate, cost-effective commercial packaging for procured items is not available.

C8.7.2.7. In lieu of commercial packaging, a contractor may provide military levels of protection given in MIL-STD-2073-1 at the contractor's option, but at no additional cost to the Government.

C8.7.2.8. Commercial items procured according to Part 12 of the FAR (reference (be)) and as defined by 44 U.S.C. 403 (reference (bf)) shall be purchased utilizing commercial and performance-based packaging methods commonly used by commercial activities. Military packaging requirements shall only be specified for those items when available commercial methods cannot satisfy the known environment and logistical conditions the item will encounter during its life cycle.

C8.7.2.9. Packaging specifications, standards, and operations shall comply with all safety requirements specified in DoD Instruction 6055.1 (reference (bg)) and 49 CFR 173 (reference (bh)).

C8.7.2.10. The DoD Components shall incorporate environmental pollution prevention measures, consistent with DoD Directive 4715.1, DoD Instruction 4715.6, and Sections 1901 through 1915 of U.S.C. 33 (references (bi) through (bk)), into packaging standards, specifications, and other instructions and processes. The selection of packaging materials shall include consideration of disposability, reuse, degradability (when it meets logistics needs), recycling, and conservation.

¹³ See URL <http://www.dscc.dla.mil/offices/packaging/specstdslist.html>.

C8.7.2.11. The DoD Components shall reuse packaging, materials, and containers to the maximum extent practical. DoD activities shall ensure reuse by establishing DoD Component procedures for container and material reclamation. The DoD Components shall also consider reduced packaging and the use of non-plastic packaging.

C8.7.2.12. The DoD Components shall, by means of the Defense Packaging Policy Group (see Appendix 15), coordinate and establish major efforts to improve packaging policies, procedures, engineering, and training to facilitate standardization and prevent duplication.

C8.7.2.13. When procuring items, the DoD Components shall specify items' packaging and marking requirements in acquisition documents to prevent needless repackaging and upgrading of packaging at the receiving activity. The DoD procuring activities shall ensure that the specified packaging and marking requirements are cost effective and adequately protect the item according to subparagraph C8.7.2.2., above.

C8.7.2.14. Upon completion of the repair at a DoD maintenance facility, repaired items shall be packaged and marked according to paragraph C8.7.2.2., above. To facilitate proper packaging and marking at commercial repair activities, the DoD Components shall specify item packaging and marking requirements in repair contracts.

C8.7.2.15. The DoD Components shall determine the quantity for each unit package for all materiel based upon the nature of the item, known logistics requirements, and normal usage factors. Commercial distribution or over-the-counter retail package quantities shall only be used when they are cost-effective and satisfy military distribution requirements.

C8.7.2.16. The DoD Components shall use electronic communication to transmit and make their packaging data requirements readily available to authorized users.

¹⁴ Joint issuance AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55, "Reporting of Supply Discrepancies," August 6, 2001, can be found at website <http://www.dlaps.hq.dla.mil/dlai/i4140.55.htm>.

C8.7.2.17. To promote packaging and marking uniformity between the Department of Defense and industry, the DoD Components shall circulate proposed packaging and marking specifications and standards for comment to a representative cross-section of the affected segments of industry. Those include industrial associations -- National standardization organizations -- and producer, manufacturer, and user societies. The DoD Components shall consider recommendations for using readily available materials and processes when they satisfy the needs of the Department of Defense.

C8.7.2.18. The DoD Components shall record and report shipments received with packaging inadequacies and discrepancies, according to the provisions outlined in AR 735-11-2/SECNAVINST 4355.18A/AFJMAN 23-215/DLAI 4140.55.¹⁴

C8.7.2.19. The DoD Components shall develop and maintain packaging standards, specifications, and similar documents, according to DoD 4120.24-M (reference (j)). Reference (j) establishes a 5-year review and validation period for military standardization documents. Under that program, packaging specification reviews shall concentrate on validating materiel cost-effectiveness, identifying and eliminating redundancies in packaging specifications, and incorporating changes that have occurred in the state-of-the-art of packaging.

C8.7.2.20. Each DoD Component shall develop procedures to measure and document packaging savings and cost-avoidance actions.

C8.7.2.21. The Defense Packaging Policy Group (see Charter at Appendix 15) is responsible for recommending revisions to the packaging guidance in this Regulation to the DUSD(L&MR).

C8.7.2.22. The Heads of the DoD Components shall comply with that guidance. The DoD Components may supplement the packaging guidance in this Regulation to address unique situations, but shall not issue separate guidance on the subject. The DoD Components shall request clarification and/or changes through the DUSD(L&MR).

C8.8. UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)

C8.8.1. Requirements

C8.8.1.1. UMMIPS shall serve as the system for allocating materiel and other logistics resources among competing demands. It shall be used during peacetime and war.

C8.8.1.1.1. UMMIPS shall be used with Chariman of the Joint Chiefs of Staff and Military Service guidance governing the overall allocation and ultimate distribution of end items to forces and activities.

C8.8.1.1.2. In developing performance agreements with their customers, materiel managers, with distribution and transportation managers, should develop time definite delivery (TDD) standards tailored to meet specific delivery requirements. Appendix 8 establishes aggregate TDD standards for use in the absence of specific customer TDD standards.

C8.8.1.1.2.1. TDD standards address the supply of materiel from the time of origination of the requirement (date of the requisition) to the time that the requisitioner acknowledges physical receipt.

C8.8.1.1.2.2. Each logistics pipeline segment involved in the processing of a requisition has been assigned a portion of the total time available. Individual segment standards should not be considered inviolate if exceeding those standards results in savings in time and improved service for the total pipeline.

C8.8.1.1.2.3. Each processing activity should attempt (considering limitations imposed by higher authority) to compensate for time lost in processing by other activities.

C8.8.1.2. For an individual customer, the UMMIPS provides for three requisition priorities based the relative urgency of need designator (UND) of the customer's requirement. The priority designator, the OSD or Chairman of the Joint Chiefs of Staff project code, and the RDD on a requisition dictate the priority of release of materiel by the supplier and the response time required of supply, distribution, and transportation processes.

C8.8.1.3. The IMM, storage activities, and transportation management activities shall design their systems and allocate their resources to meet the priority and service levels that are dictated by the priority designators, RDDs, and approved OSD and Chairman of the Joint Chiefs of Staff project codes used by the customers.

C8.8.1.4. Materiel shall be supplied to users in time to meet their documented delivery requirements, subject to constraints of resources and capability.

C8.8.1.5. ICP, storage activity, container consolidation point, and transportation management personnel shall work in close coordination to ensure that the customer requirements are satisfied, both in terms of issuing the requisitioned materiel and delivering on time.

C8.8.1.6. All levels of logistic management shall share the responsibility for maintenance of the priority system and exercise intensive surveillance to ensure a disciplined operating-level application of UMMIPS criteria. Activity requisitioning priority guidelines and performance statistics shall be established, maintained, and monitored.

C8.8.2. Procedures

C8.8.2.1. Customers shall communicate their wholesale delivery requirements by the use of a priority designator and the designation, or non-designation, of an RDD.

C8.8.2.1.1. In developing performance agreements supporting those delivery requirements, materiel managers should start with the pipeline segments and aggregate times displayed in Appendix 8 as "time-definite delivery standards." Working with distribution and transportation managers, they should negotiate with specific customers or their representatives to tailor those TDD standards to allow for the needs of the customers.

C8.8.2.1.2. In the absence of specific customer TDD standards, the times applicable to each pipeline segment of the logistics system are displayed in Appendix 8. The customer should expect with 85 percent reliability that the total time from order placement to receipt to be within the total order-to-receipt time depicted in Appendix 8 for the combination of priority designator and RDD used, including blank RDDs.

C8.8.2.2. Upon receiving customer requisitions, the IMMs shall allocate on-hand materiel stocks and issue materiel release orders to storage activities or take procurement actions according to the sequence specified in DoD 4000.25-1-M (reference (r)).

C8.8.2.3. All requirements with an RDD of "999", "N_ _", or "E_ _" shall be processed on a 24-hour basis, 7 days a week. All other requirements shall be processed during the normal workweek. Work shifts may be adjusted on the basis of volume to meet customer requirements. The DoD Components shall ensure that the capability is maintained to process requirements 7 days a week, 24 hours a day to implement authorized contingency plans. The Heads of the DoD Components may institute judicious on-call staffing programs to satisfy those provisions. Information processing systems shall be scheduled and operated to ensure the daily flow of information to customers.

C8.8.2.4. To gauge logistic system timeliness, the performance data collection system developed and coordinated by the System Administrator for the Logistics Metric Analysis Reporting System (LMARS) and the Customer Wait Time/Time Definite Delivery data provided according to DoD Instruction 4140.61 (reference (b1)) shall be used to produce applicable effectiveness reports.

C9. CHAPTER 9

SPECIAL REQUIREMENTS

C9.1. STRATIFICATION

C9.1.1. Requirements

C9.1.1.1. The goal of the stratification process is to uniformly portray the materiel requirements and assets of individual secondary and ammunition items at the wholesale and available retail levels. Stratification requirements and procedures for ammunition items are in paragraph C9.3.2., below.

C9.1.1.2. Each DoD ICP shall accomplish the inventory stratification for each item under its management cognizance.

C9.1.1.3. Secondary items shall be summarized by budget category, by IMM, and, where possible, by weapon system.

C9.1.1.4. Military Service secondary item stratification processes shall be developed, according to the procedures that follow in subparagraphs C9.1.2.1. through C9.1.2.3., below, which address how serviceable, unserviceable, and suspended assets are to be applied to the gross requirements quantity. Asset condition codes that fall into each of those categories are defined in DoD 4000.25-7-M-S-1 (reference (bb)).

C9.1.1.5. The DoD stratification is designed to provide visibility of retail and wholesale requirements, assets (on-hand and on-order), and overages or shortfalls. The stratification results shall be utilized as the basis for developing reparable item procurement and repair budget requirements, IMM repair scheduling and depot induction requirements, and for the development and execution of depot-level reparable item maintenance programs.

C9.1.2. Procedures

C9.1.2.1. Stratification is the process of applying assets, by type (from the most to least serviceable condition), for an individual item against the requirements for the same item in a prescribed priority sequence. Individual item asset and/or requirement comparisons shall be converted to dollars and summarized into dollar value stratification summaries. Subsequently, the results may be rearranged to facilitate analysis. The DoD stratification process shall be accomplished according to DoD 4140.1-M (reference (bm)).

C9.1.2.2. The Central Secondary Item Stratification (CSIS) shall be an automated capability that applies to wholesale and retail asset and requirements data prepared by an automated process while the Local Secondary Item Stratification (LSIS) should be prepared when asset and/or requirements data is not prepared by an automated process. The CSIS and the LSIS shall uniformly display the materiel requirements and associated asset status of individual secondary items and generate summaries of essential information. The stratification tables shall:

C9.1.2.2.1. Be based on data and factors used in the daily management of the individual items. The basic supply data on assets and requirements may be accumulated and stored in any applicable manner at the DoD Components' option.

C9.1.2.2.2. Provide the foundation for developing secondary item procurement and depot maintenance budgets, determining the readiness status, and relating assets to the AAO. If a methodology other than stratification is used as a foundation, an audit trail to the applicable stratification table shall be submitted to the USD(L&MR).

C9.1.2.3. Secondary item assets shall be stratified at least semiannually. One stratification shall be as of September 30 (for inventory reporting and funding reviews), and the other shall be as of March 31 (for budget preparation).

C9.2. SUPPLY SYSTEM INVENTORY REPORT (SSIR)

C9.2.1. Requirements

C9.2.1.1. An SSIR shall be provided annually to the ADUSD(SCI). It shall show the value of wholesale and retail inventory. The report shall include materiel held for sale or issue, and materiel in the process of repair for future sale. Sales transactions may be executed through the transfer of funds between Federal entities; it is not essential that the transaction be an exchange of goods for cash or cash equivalents.

C9.2.1.2. Inventory shall be valued using the latest acquisition cost method (or alternate method) prescribed by the DUSD(L&MR).

C9.2.1.2.1. Inventory ready for issue shall be valued at its latest acquisition cost. All Class V ammunition inventory shall be valued at its latest acquisition price and shall not be devalued as provided for in subparagraphs C9.2.1.2.2. and C9.2.1.2.3., below.

C9.2.1.2.2. Reparable inventories that are not ready for issue shall be valued at their latest acquisition cost, less the expected repair cost.

C9.2.1.2.3. Inventory that stratifies as "Potential Reutilization and/or Disposal Stock" (both serviceable and unserviceable) and inventory not expected to survive repair shall be valued at the net realizable cash value by applying a salvage rate. The ADUSD(SCI) shall annually establish the salvage rate based upon information from the DRMS.

C9.2.2. Procedures

C9.2.2.1. Reporting Format and Content

C9.2.2.1.1. The ADUSD(SCI) shall provide a computer spreadsheet file containing the required report format to each DoD Component. That spreadsheet template shall be used to report this information:

C9.2.2.1.1.1. Worldwide supply system inventory of principal items, including those stocked at wholesale and retail levels, and in transit, but excluding those listed in subparagraph C9.2.2.2., below.

C9.2.2.1.1.2. All secondary items inventory irrespective of funding source, including the following items:

C9.2.2.1.1.2.1. In-store at depots, posts, camps, stations, bases, and ships, excluding materiel in the hands of end-users that is not held for sale.

C9.2.2.1.1.2.2. In leased or controlled storage facilities.

C9.2.2.1.1.2.3. In transit.

C9.2.2.1.1.2.4. Located in Government facilities.

C9.2.2.1.1.2.5. In the hands of contractors for modification, repair, or production and return to the supply system.

C9.2.2.1.2. The DoD Components shall report both principal and secondary items on the same spreadsheet. For secondary items, the DoD Components shall use separate rows on the spreadsheet to report reparable or consumable items, wholesale or retail level (see definitions for "Wholesale Stock" and "Retail Stock"), and source of funding (working capital fund, procurement appropriation, and operations and

maintenance appropriation). Supplementary procedures for SSIR reporting of Class V ammunition inventory are in paragraph C9.3.6., below.

C9.2.2.1.2.1. Reporting Categories for Principal Items. The DoD Components shall not use inventory stratification categories for reporting principal items, but report only total inventory value by these materiel categories:

C9.2.2.1.2.1.1. Weapons.

C9.2.2.1.2.1.2. Major Aircraft Subsystems and Related Equipment.

C9.2.2.1.2.1.3. Major Ship Subsystems, Small Craft, and Related Equipment.

C9.2.2.1.2.1.4. Munitions and Related Equipment.

C9.2.2.1.2.1.5. Missile Systems and Related Equipment.

C9.2.2.1.2.1.6. Tank, Combat, and Tactical Vehicle Subsystems.

C9.2.2.1.2.1.7. Support Vehicles and Railway Equipment.

C9.2.2.1.2.1.8. Electronics, Communications, Control and Information Systems, and Related Equipment.

C9.2.2.1.2.1.9. Propulsion Systems, Aircraft Engines, and Related Equipment.

C9.2.2.1.2.1.10. Uncategorized Major Equipment.

C9.2.2.1.2.2. Reporting of Stratified Secondary Item Inventory. The DoD Components shall report secondary items assets using the inventory stratification category columns of the spreadsheet template. They shall use the September 30 stratification to report secondary items.

C9.2.2.1.2.3. Reporting of Intransit Secondary Item Inventory. Materiel that is between storage locations, either wholesale or retail; materiel shipped from vendors after the U.S. Government accepts it, but the IMM has not received it; materiel temporarily in use or on loan with contractors or schools; and inventory that is not otherwise stratified shall be reported as "Intransit Stock." Such inventories are not included in the stratification process, but are recorded in financial inventory accounting

records or in retail inventories. This definition of intransit stock or intransit inventory applies only to the SSIR.

C9.2.2.2. Exclusions to SSIR Reporting. Categories of materiel excluded from the SSIR are:

C9.2.2.2.1. Complete ships, submarines, aircraft, helicopters, tanks, and other combat and tactical vehicles, intercontinental and intermediate-range ballistic missiles, space vehicles, and other major end items.

C9.2.2.2.2. With the exception of Class V ammunition inventory, materiel in the hands of end-users such as materiel with troop units, in maintenance facilities, and on combat ships, except for aircraft carriers and amphibious assault ships.

C9.2.2.2.3. Property acquired to perform civil functions.

C9.2.2.2.4. The Treaty Compliance & Threat Reduction Agency inventory.

C9.2.2.2.5. The National Security Agency and classified program inventory.

C9.2.2.2.6. Materiel reported to the DRMS for reutilization screening and disposal and foreign-owned materiel.

C9.2.2.2.7. Materiel in storage facilities of the reporting DoD Component owned by the other DoD Components or the other Federal Agencies. Such materiel is excluded because it is to be reported by the owning DoD Component.

C9.2.2.2.8. Items installed or incorporated in a higher assembly.

C9.2.2.3. Reporting

C9.2.2.3.1. The Heads of the DoD Components shall appoint an official representative to serve as the DoD Component's single point of contact with the ADUSD(SCI) on matters related to the SSIR reporting requirement.

C9.2.2.3.2. The Heads of the DoD Components shall submit their inventory reports electronically in the format specified in Appendix 16 to the ADUSD(SCI), not later than February 1 of each year. In addition to principal and secondary inventory data as of September 30, each report shall have a narrative that describes significant trends, changes from previous reporting periods, and modifications to systems, procedures, or operations impacting on the reported value of the materiel.

The reporting requirements have been assigned Report Control Symbol DD-A&T(A)1000.

C9.3. AMMUNITION STRATIFICATION, REPORTING, AND CROSS LEVELING

C9.3.1. General

C9.3.1.1. Requirements

C9.3.1.1.1. The Military Services shall stratify all conventional ammunition inventories to assess the ability of the inventory to meet the stated requirement and ensure that inventories above requirements are kept only if warranted.

C9.3.1.1.2. The Military Services shall utilize the stratification process to provide a joint view of assets in long-supply position, which shall enable the Military Services to participate in cross-leveling activities and thereby optimize the whole DoD ammunition inventory. Cross-leveling activities should serve to off-set individual procurements of the Military Services and enable disposal and demilitarization of only those assets that are excess to all DoD requirements.

C9.3.1.2. Procedures

C9.3.1.2.1. The Military Service shall apply the requirements and procedures in this section to all conventional ammunition, including ammunition managed by the Single Manager for Conventional Ammunition (SMCA) under DoD 5160.65-M (reference (bn)), tactical missiles, and all other Military Service-managed conventional munitions. Toxic chemical and special weapons are excluded.

C9.3.1.2.2. The Military Services shall not procure nor dispose of ammunition assets without first attempting to acquire or donate long-supply assets from the DoD inventory, as shown on the individual Military Services' current year stratification report.

C9.3.2. Munitions Stratification

C9.3.2.1. Requirements

C9.3.2.1.1. At least annually, each Military Service shall stratify its conventional munitions inventory into these categories:

C9.3.2.1.1.1. Requirement Related Munitions Stock (RRMS). The inventory of munitions stock, including preferred and substitutes, applied to the total munitions requirements (TMR), individual item procurement lead time, and other elements that are applicable to internal Military-Service-level inventory management during stratification. The RRMS provides the Service with inventory support throughout the period of the POM and lead time to procure.

C9.3.2.1.1.2. Economic Retention Munitions Stock (ERMS). The inventory quantity of an item greater than the RRMS that is found through economic analysis to be more cost effective to retain for future peacetime issues versus disposing of it and reacquiring it in the future to meet projected requirements. To warrant economic retention, an item shall have a reasonably predictable future requirement or demand rate. Economic retention quantities are normally calculated through use of formulas considering future requirements, disposal, and future acquisition costs versus the cost of retention.

C9.3.2.1.1.3. Contingency Retention Munitions Stock (CRMS). The inventory quantity of an item greater than the RRMS that shall be retained to support requirements not included in the TMR calculation. Assets retained for contingencies are intended for situations other than those already considered in the war reserve materiel or the TMR requirements. Contingencies may be defined as assets being set aside in special war reserve stock for allies; unpredictable homeland defense or counter-narcotics missions; unpredictable weapons system tests, demonstrations, or assets being retained until suitable replacement weapon system arrives from contract.

C9.3.2.1.1.4. Potential Reutilization and Disposal Stocks (PR/DS). The inventory quantity of an item that is greater than the sum of the RRMS, the ERMS and the CRMS. The PR/DS is considered excess to the requirements of an individual Military Service, but has not yet been found to be excess to the requirement of all the Military Services. During the year cross-leveling cycle that followed its categorization as PR/DS, the PR/DS shall be either:

C9.3.2.1.1.4.1. Claimed by another Military Service;

C9.3.2.1.1.4.2. Moved by the owning Military Service to another retention category as a result of a new requirements determination and asset stratification cycle; or

C9.3.2.1.1.4.3. If unclaimed by another Military Service at the end of the year cross-leveling cycle, moved to disposal.

C9.3.2.1.2. The Military Services shall provide visibility of munitions in their inventories by providing their annual munitions stratification report to each other, including the USCG and the USSOCOM.

C9.3.2.2. Procedures

C9.3.2.2.1. Internal Stratification Reports. At least annually, each Military Service shall create an internal munitions stratification report.

C9.3.2.2.1.1. The report shall display the Military Services' RRMS, ERMS, CRMS, PR/DS, and TMR.

C9.3.2.2.1.1.1. The TMR is the sum of war reserve munitions requirements and training, testing, and current operational requirements. In DoD Instruction 3000.4 (reference (bo)), the TMR is defined as the equivalent to the AAO.

C9.3.2.2.1.1.2. The Military Services may also include other elements that are applicable to internal Military-Service-level inventory management.

C9.3.2.2.1.2. The report shall be the basis for providing these two additional reports:

C9.3.2.2.1.2.1. An annual external munitions stratification report to the other Military Services. That report shall display only those munitions stratified in long-supply categories of ERMS, CRMS, and PR/DS.

C9.3.2.2.1.2.2. An annual summary-level munitions stratification report to the DUSD(L&MR) under subparagraph C9.3.2.2.2., below.

C9.3.2.2.2. Summary Stratification Report

C9.3.2.2.2.1. Each year the Military Services shall submit to the DUSD(L&MR) a summary ammunition stratification report. The data shall be taken from the Military Services' September 30 ammunition stratification report. The Air Force may use its March 31 ammunition stratification report.

C9.3.2.2.2.2. Data shall be at the Military Service level. The report shall show the dollar value of the TMR, total munitions inventory, the RRMS, the ERMS, the CRMS, and the PR/DS.

C9.3.2.2.2.3. The report is due the end of each January. Copies of the report shall be provided to the Chairman of the Joint Chiefs of Staff/J4-SMPED, the Office of the Under Secretary of Defense (A&T)/S&TS, and the Office of the Executive Director for Conventional Ammunition (AMXED).

C9.3.2.2.3. Details relative to ammunition inventory stratification procedures are in DoD 5160.65-M (reference (bn)).

C9.3.3. Munitions Cross Leveling

C9.3.3.1. Requirements

C9.3.3.1.1. The Military Services shall cross-level or redistribute munitions in long supply from one Military Service to the other Military Service against that Military Service's unfilled requirements for those munitions. (See Appendix 1 for definition of munitions cross leveling.)

C9.3.3.1.2. All ammunition stratified in long-supply categories shall be cross leveled between the Military Services on a free issue basis.

C9.3.3.1.3. All ammunition inventory that is excess to Military Service requirements shall be screened by the other Military Services prior to transferring it to the demilitarization account as DoD excess, except when safety issues require immediate disposal.

C9.3.3.2. Procedures

C9.3.3.2.1. Each Military Service shall review the other Military Services' annual external munitions stratification reports to identify potential cross-leveling opportunities and request logistics data for items of interest.

C9.3.3.2.2. Each Military Service shall consider all stock in the ERMS, the CRMS, and the PR/DS as potentially available for cross leveling if other Military Services have shortages in their RRMS. The owning Military Service shall decide on the final availability of the ERMS and the CRMS after assessing the acceptability of risk associated with draw down of the stockpile.

C9.3.3.2.3. Each Military Service shall maintain records that document cross-leveling activity.

C9.3.3.2.4. Details relative to munitions cross-leveling procedures are in DoD 5160.65-M (reference (bn)).

C9.3.4. Requirements Computation Key To Stratification and Cross Leveling

C9.3.4.1. Requirement. To compute the TMR, the Military Services and the USSOCOM shall use the capabilities-based munitions requirement process described in DoD Instruction 3000.4 (reference (bo)), with amplifying Military Service guidance and the implementing guidance as stated in the current edition of the Defense Planning Guidance of the Secretary of Defense.

C9.3.4.2. Procedures. Procedures for determining the TMR are in DoD Instruction 3000.4 (reference (bo)).

C9.3.5. Retention Computation Key To Stratification and Cross Leveling

C9.3.5.1. Requirement. The Military Services shall determine the need to retain ERMS. That determination shall be based upon the projected need for the stock beyond the POM period and shall be supported by an economic analysis of the cost to retain (including storage costs) versus the cost to procure (including disposal/demilitarization costs).

C9.3.5.2. Procedures. Details relative to the methodologies used to compute economic retention levels for munitions are in DoD 5160.65-M (reference (bn)).

C9.3.6. Munitions Reporting in the SSIR

C9.3.6.1. Requirements

C9.3.6.1.1. The supplemental SSIR reporting guidance for Class V ammunition inventory described in this paragraph shall be used with the basic reporting guidance in section C9.2., above.

C9.3.6.1.2. All Class V ammunition inventory shall be included in the annual SSIR report. The exclusion under subparagraph C9.2.2.2.2., above, does not apply to ammunition inventory.

C9.3.6.2. Procedures

C9.3.6.2.1. According to SSIR rules for reporting principle items, all Class V ammunition inventory shall be valued at its latest acquisition price as in

subparagraph C9.2.1.2.1., above, and shall not be devalued as in subparagraphs C9.2.1.2.2. and C9.2.1.2.3., above.

C9.3.6.2.2. All Class V ammunition inventory shall only be reported under two principal item materiel categories:

C9.3.6.2.2.1. Munitions and Related Equipment (subparagraph C9.2.2.1.2.1.4., above).

C9.3.6.2.2.2. Missile Systems and Related Equipment (subparagraph C9.2.2.1.2.1.5., above).

C9.4. LOGISTICS SUPPORT OF U.S. NON-DoD OR NON-GOVERNMENT AGENCIES AND INDIVIDUALS IN OVERSEAS MILITARY COMMANDS

C9.4.1. Requirements

C9.4.1.1. Overseas commanders may provide supplies and services on a reimbursable basis to eligible U.S. non-governmental, nonmilitary agencies, and individuals who directly assist the overseas commander in carrying out the U.S. Government mission. The overseas commander shall decide if an agency or individual is eligible to receive such logistics support.

C9.4.1.2. The logistics support that an overseas commander provides to non-governmental, nonmilitary agencies, or individuals in a foreign country shall be subject to the terms of:

C9.4.1.2.1. Any agreement between the United States and the government of the foreign country restricting categories of organizations and persons to whom support may be extended and/or classes and kinds of supplies and services that may be provided.

C9.4.1.2.2. Any contract for the provision of supplies or services that limits recipients or beneficiaries of such supplies or services.

C9.4.2. Procedures

C9.4.2.1. Normally, support (e.g., office space, telephones) shall be limited to that which is necessary for the Agencies or individuals to perform their specific functions and to when they are engaged exclusively in U.S. Government activities and not in commercial activities with foreign nationals.

C9.4.2.2. In emergency situations resulting in hardships, logistics support may be provided on a reimbursable basis to agencies and individuals not otherwise eligible until other adequate facilities are available.

C9.5. EXCHANGE OR SALE OF NONEXCESS PERSONAL PROPERTY

C9.5.1. Requirements

C9.5.1.1. In acquiring personal property, the DoD Components may exchange or sell eligible nonexcess items. The exchange allowance or proceeds may be applied in whole or partial payment for the item acquired.

C9.5.1.2. This authority shall be used to the maximum extent consistent with the economical and efficient accomplishment of an approved program.

C9.5.2. Procedures

C9.5.2.1. Under 40 U.S.C. 481(c) (reference (am)), any equipment, including repair parts, may be exchanged or sold subject to part 101-46 of the Federal Property Management Regulation (reference (bp)) and these limitations:

C9.5.2.1.1. The application of exchange or sale allowances as whole or partial payment in the acquisition of personal property is authorized only when the item or items to be exchanged or sold are:

C9.5.2.1.1.1. Similar to the item or items to be acquired.

C9.5.2.1.1.2. Not excess, and the item or items to be acquired are required for approved programs.

C9.5.2.1.1.3. Being replaced with an item or items that perform substantially all functions of the item or items being exchanged or sold. The acquiring activity shall prepare a written administrative determination of economic advantage that shows:

C9.5.2.1.1.3.1. The anticipated economic advantage to the U.S. Government resulting from the use of the exchange or sale authority.

C9.5.2.1.1.3.2. That exchange or sale allowances shall be applied in payment for the items to be acquired.

C9.5.2.1.1.3.3. That if required, the property has been made safe or innocuous, or has been demilitarized.

C9.5.2.1.2. In documenting exchange or sale transactions, detailed cross-reference between old and new items is not required, but records shall be maintained that are adequate to substantiate that the items acquired were similar to the items exchanged or sold and that any exchange or sale allowances applied as whole or part payment for property acquired were, in fact, available for such application.

C9.5.2.1.3. Exchange or sale transactions may not be executed when items are in Federal Supply Classification Groups (FSCGs) 10-12, 14, 15 (except 1560), 42, 44, 51, 54, 68, 71, and 84, except with the approval of the GSA. Waiver requests should be sent to: General Services Administration, Office of Government-wide Policy, Office of Transportation and Person Property (MT), Washington, DC 20405.

C9.5.2.1.4. The limitations in subparagraphs C9.5.2.1.1. through C9.5.2.1.3., above, may not be construed to authorize:

C9.5.2.1.4.1. The acquisition of personal property that is not authorized by law.

C9.5.2.1.4.2. The acquisition of personal property in contravention of any other restrictions on procurement of commodities or any established replacement policies or standards issued by the President; the Congress; the Administrator, GSA; or the Secretary of Defense, or designee.

C9.5.2.1.4.3. The exchange or sale of excess or surplus property even though otherwise eligible in the acquisition of personal property.

C9.5.2.1.4.4. The exchange or sale authority for the exchange or sale of strategic or critical materiel, except as authorized by the DUSD(L&MR).

C9.5.2.1.4.5. The exchange or sale authority for the exchange or sale of Nuclear Regulatory Commission-controlled materiel.

C9.5.2.1.4.6. The exchange or sale of controlled substances, except according to DoD 4160.21-M-1 (reference (al)).

C9.5.2.1.4.7. The exchange or sale of scrap materiel, except in the case of scrap gold for fine gold.

C9.5.2.1.4.8. The exchange or sale of property otherwise eligible that was acquired from another Agency or a DoD Component as "nonexcess," "excess," or "surplus," unless that property was in use for 1 year after acquisition.

C9.5.2.2. Property acquired by exchange shall be recorded at acquisition cost. The credit received from the exchange is considered the selling price of exchanged property and is accounted for as a gain or loss on the sale of the property.

AP1. APPENDIX 1

DEFINITIONS

AP1.1.1. Acquisition Lead Time. The sum of the administrative lead time and production lead time.

AP1.1.2. Active Inventory. Materiel that is expected to be consumed within the budget year (2 years) and materiel that has been purchased to meet specific war reserve requirements.

AP1.1.3. Administrative Lead Time (ALT). The time interval between identifying a need to buy and the letting of a contract or the placing of an order.

AP1.1.4. Approved Acquisition Objective (AAO). The quantity of an item authorized for peacetime and wartime requirements to equip and sustain U.S. and Allied Forces, according to current DoD policies and plans. That quantity shall be sufficient to support other U.S. Government Agencies, as applicable.

AP1.1.5. Assembly. In logistics, an item forming a portion of an equipment, that can be provisioned and replaced as an entity and which normally incorporates replaceable parts or groups of parts (Joint Pub 1-02, reference (bq)). (See also "component," below.)

AP1.1.6. Asset. Primary or secondary materiel, including materiel on hand and due-in.

AP1.1.7. Aviation Critical Safety item (CSI)/Flight Safety Critical Aircraft Part (FSCAP). An aviation-related part, assembly, installation or production system with one or more critical or critical safety characteristics that, if missing or not conforming to the design data, quality requirements or overhaul and maintenance documentation, would result in an unsafe condition that could cause loss or serious damage to the end item or major components, loss of control, uncommanded engine shutdown or serious injury or death to personnel. Unsafe conditions relate to hazard severity categories I and II of MIL-STD-882¹⁵ and include items determined to be "life-limited," "fracture critical," "fatigue-sensitive," etc. The determining factor in Aviation CSI/FSCAP is the consequence of failure, not the probability that the failure or consequence would occur.

¹⁵ See URL <http://npoesslib.ipn.noaa.gov/techlib/doc124/doc124.pdf> for the military standard on system safety program requirements.

AP1.1.7.1. Critical Characteristic. Any feature throughout the life cycle of an aviation CSI/FSCAP, such as dimension, tolerance, finish, material or assembly, manufacturing or inspection process, operation, field maintenance, or depot overhaul requirement that if non-conforming, missing, or degraded may cause the failure or malfunction of the aviation CSI/FSCAP.

AP1.1.7.2. Manufacturing Critical Characteristics. Critical characteristics produced during the manufacturing process.

AP1.1.7.3. Installation Critical Characteristics. Critical characteristics that are not introduced during the manufacture of a part, but are critical in terms of assembly and/or installation, e.g., proper torque.

AP1.1.8. Cancellation Request. A transaction that allows a requisitioner or other authorized activities to request cancellation of all or a portion of the quantity of materiel ordered in a previously submitted requisition.

AP1.1.9. Care of Supplies in Storage (COSIS). A program composed of a set of processes and procedures whose purpose is to ensure that materiel in storage is maintained in ready-for-issue condition or to prevent uneconomic deterioration of unserviceable materiel.

AP1.1.10. Cataloging. The act of naming, classifying, describing, and numbering each item repetitively used, purchased, stocked, or distributed to distinguish each item from every other item. Also included is the maintenance of information related to the item and the dissemination of that information to item users.

AP1.1.11. Classes of Supply. Not to be confused with Federal Supply Class, terminology used to divide supplies and equipment into 10 easily identifiable categories of materiel that are depicted by Roman Numerals, as follows:

AP1.1.11.1. Class I. Subsistence, including gratuitous health and welfare items.

AP1.1.11.2. Class II. Clothing, individual equipment, tentage, organizational tool kits, hand tools, administrative, and housekeeping supplies and equipment.

AP1.1.11.3. Class III. Petroleum fuels, lubricants, hydraulic and insulating oils, preservatives, liquid and compressed gases, bulk chemical products, coolants, de-icing and antifreeze compounds, together with components and additives of such products, and coal.

AP1.1.11.4. Class IV. Construction materials including installed equipment and all fortification and/or barrier materials.

AP1.1.11.5. Class V. Ammunition of all types (including chemical, biological, radiological, and special weapons), bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.

AP1.1.11.6. Class VI. Personal demand items (non-military sales items).

AP1.1.11.7. Class VII. Major end items. A final combination of end products that is ready for its intended use; that is, launchers, tanks, mobile machine shop, and vehicles; etc.

AP1.1.11.8. Class VIII. Medical materiel, including medical-peculiar repair parts.

AP1.1.11.9. Class IX. Repair parts and components including kits, assemblies and subassemblies, repairable and consumable items required for maintenance support of all equipment, excluding medical-peculiar repair parts.

AP1.1.11.10. Class X. Materiel to support nonmilitary programs, such as agriculture and economic development, not included in classes I through IX.

AP1.1.12. Commercial Packaging. The materials and methods used by the supplier that meet the requirements of the distribution systems serving both the Department of Defense and commercial customers.

AP1.1.13. Component (Materiel - Lower Case). An assembly or any combinations of parts, subassemblies, or assemblies mounted together in manufacture, assembly, maintenance, or rebuild (Joint Pub 1-02, reference (bq)).

AP1.1.14. Consumable Item. An item of supply (except explosive ordnance and major end items of equipment) that is normally expended or used up beyond recovery in the use for which it is designed or intended.

AP1.1.15. Consumer Level of Supply. An inventory, regardless of funding source, usually of limited range and depth, held only by the final element in an established supply distribution system for the sole purpose of internal consumption.

AP1.1.16. Container Consolidation Point (CCP). A facility whose purpose is to combine shipments from multiple shippers to generate full container or air pallet loads of cargo for shipment direct to receivers.

AP1.1.17. Controlled Inventory Items. Those items designated as having characteristics that require that they be identified, accounted for, secured, segregated, or handled in a special manner to ensure their safeguard or integrity. Controlled inventory item categories in descending order of the degree of control normally exercised are, as follows:

AP1.1.17.1. Classified Items. Materiel that requires protection in the interest of national security.

AP1.1.17.2. Sensitive Items. Materiel that requires a high degree of protection and control due to statutory requirements or regulations, such as narcotics and drug abuse items; precious metals; items of high value, highly technical, or hazardous nature; and small arms and ammunition.

AP1.1.17.3. Pilferable Items. Materiel having a ready resale value or application to personal possession, which is especially subject to theft.

AP1.1.18. Customer Demand Pattern. A historical profile of the demands for an item arrayed within timeframes in terms of the geographic locations of the requiring activities and the quantitative volumes required.

AP1.1.19. Customer Wait Time (CWT). A measurement of the total elapsed time between the issuance of a customer order and satisfaction of that order (DoD Instruction 4140.61, reference (b1)).

AP1.1.20. Daily Summary Transaction Reporting. Daily reporting to the ICP of supply transactions affecting the demand base or stock status of materiel.

AP1.1.21. Defense Logistics Information Service (DLIS). A field activity of the DLA located at Battle Creek, MI, the DLIS serves as the custodian of Federal logistics data for suppliers, supply items, assigns NSNs, disseminates logistics information, and serves as the United States National Codification Bureau.

AP1.1.22. Defense Reutilization and Marketing Office (DRMO). An operating level organization of the DRMS.

AP1.1.23. Defense Reutilization and Marketing Service (DRMS). A field activity of the DLA charged with the responsibility of managing all aspects of the process of receiving, storing, marketing, redistributing, and disposing of all materiel determined by elements of the DoD materiel management structure to be excess to the needs of a DoD activity.

AP1.1.24. Defense Transportation System (DTS). A composite of military controlled or arranged terminal services, airlift, sealift, and land transportation.

AP1.1.25. Demand. An indication of a requirement (requisition, request, issue, and reparable generation; etc.) for issue of serviceable materiel. Demands are categorized as either "recurring" or "non-recurring."

AP1.1.26. Demand-Based Requirements. A requirements determination process that has a goal targeted at filling a percent of demand or at satisfying demand within a given period of time.

AP1.1.27. Demand-Support Items. Items that are stocked based on forecasted usage. Demand-supported items are stocked with demand-based requirements on the basis of economics or with limited demand requirements on basis of military mission essentiality.

AP1.1.27.1. Economic Stockage. An item with demand-based requirements is stocked-based on economics when the cost of being out of stock is equal to or exceeds the cost of holding stock and shall be stocked at the wholesale level.

AP1.1.27.2. Essentiality Stockage. An item with limited-demand requirements is stocked based on anticipated usage, but at a level that the item does not meet the established economic stockage criteria. Although a limited-demand item fails the economic criteria for stockage because its probability of demand is low, it qualifies as an MME code I, II, or III because the lack of a replacement would seriously hamper the operational readiness of a weapon system.

AP1.1.28. Demand Development Period. The period of time extending from the date of preliminary operational capability to a point in time when spare and repair parts requirements can be forecast based on actual demands using statistically valid methods.

AP1.1.29. Demilitarization. The act of destroying the functional or military capabilities of certain types of equipment or material that has been screened through inventory control points and declared surplus or foreign excess. Items that are subject to demilitarization include defense articles on the United States Munitions List, as provided by Section 38 of the "Arms Export Control Act" (22 CFR 121 (reference (aj))). Also included are items on the Commerce Control List of the Department of Commerce (15 CFR 774 (reference (ak))), and items on the United States Munitions Import List of the Bureau of Alcohol, Tobacco, and Firearms of the Department of Treasury. That term includes mutilating, cutting, crushing, scrapping, melting, burning, or otherwise altering to prevent the further use of that equipment or material for its originally intended purpose, and applies equally to equipment or material in serviceable or unserviceable condition.

AP1.1.30. Depot-Level Repairable Item. A repairable item of supply that is designated for repair at depot level or that is designated for repair below the depot level, but if repair cannot be accomplished at that level, shall have its unserviceable carcass is either forwarded to the depot for repair or condemnation, or reported to the ICP for disposition.

AP1.1.31. Donations. Donable property under the control of a Military Service and/or a Defense Agency authorized for donation by statute to an authorized donee.

AP1.1.32. Economic Order Quantity (EOQ). The quantity derived from a mathematical technique used to determine the optimum (lowest) total variable costs to order and hold inventory.

AP1.1.33. Economic Repair Quantity. The quantity derived from a mathematical technique used to determine the optimum (lowest) total variable costs to repair and hold inventory.

AP1.1.34. Electronic Data Interchange. A standard, commercial syntax and set of variable-length transactions to facilitate the interchange of electronic data relating to such business transactions as order placement and processing, shipping and receiving information, invoicing, and payment and cash application.

AP1.1.35. End Item. A final combination of end products, component parts, and/or materials ready for its intended use, e.g., a ship, tank, mobile machine shop, or aircraft (Joint Pub 1-02, reference (bq)).

AP1.1.36. Engineering Support Activity (ESA). The organization designated to provide engineering/technical assistance including the development of technical data and engineering criteria, engineering representation, guidance and decisions.

AP1.1.37. End-User. That individual or organizational element authorized to use supply items. That individual or element is normally the terminal point in the logistics system at which action is initiated to obtain materiel required for the accomplishment of an assigned mission or task.

AP1.1.38. Essential Item. A support item or a repair part whose absence renders the supported system or end item inoperable.

AP1.1.39. Excess. Materiel that has completed reutilization screening within the Department of Defense and is not required for the needs and the discharge of responsibilities of any DoD activity.

AP1.1.40. Excess Property at DRMOs. Property not required for the needs and the discharge of the responsibilities of a DoD activity and that is available for reutilization or transfer within the Federal Government, including the Department of Defense. (Property for donation or sale is surplus, not excess, by law.)

AP1.1.41. Federal Logistics Information System (FLIS). The comprehensive Government-wide system used to catalog, stock number, maintain and disseminate logistics information for items of supply. That term represents the common data system that provides the supply item data reflected in the Federal Catalog System.

AP1.1.42. Federal Supply Class (FSC). A series of 4 numerals at the beginning of the NSN that designates the general commodity grouping of the item of supply; e.g., Class 5130, Hand Tools, Power Driven.

AP1.1.43. Field-Level Repairable Item. A repairable item of supply that is normally repaired below the depot level of maintenance and for which condemnation authority may be exercised below the depot level of maintenance.

AP1.1.44. Force or Activity. A unit, organization, or installation performing a function or mission; a body of troops, ships, or aircraft, or a combination thereof; a function, mission, project, or program, including the Military Assistance Program (MAP) and Foreign Military Sales (FMS).

AP1.1.45. Force or Activity Designator (F/AD). A Roman numeral (I to V) that the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, or a DoD Component assigns to a unit, organization, installation, project, or program to indicate its relative mission essentiality. The F/AD is an integral part of the UMMIPS.

AP1.1.46. Fulfillment Agent. One who physically performs the required activities of the supply chain, e.g., distribution and transportation managers.

AP1.1.47. Government-Furnished Materiel (GFM). Material owned by the U.S. Government and furnished to a contractor to use for specific contract purposes. Title to all material furnished by the U.S. Government remains with the U.S. Government. GFM is property that may be incorporated into or attached to a deliverable end item or that may be consumed or expended in performing a contract. GFM does not include materiel sold by the U.S. Government to a contractor.

AP1.1.48. Hazardous Item. An item of supply consisting of materiel that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

AP1.1.49. Implied Shortage Cost. The derived cost of a shortage of stock based upon a forecast of the number of days of delay in the availability of materiel.

AP1.1.50. In-Process Assets. Assets on order from DoD vendors and not yet shipped, assets in repair at depot-level organic or commercial repair facilities, and assets in repair at intermediate repair facilities.

AP1.1.51. In-Storage Assets. Assets in storage at retail consumer level sites, at retail intermediate storage sites, at disposal activities, or in wholesale inventories.

AP1.1.52. Inactive Inventory. Materiel that is not expected to be consumed within the budget period, but is likely to be used in future years.

AP1.1.53. Inactive Item. An item without a wholesale demand in the last 5 years for which no current or future requirements are anticipated by any registered user or the IMM.

AP1.1.54. Initial Operational Capability (IOC). The first attainment of the capability to use effectively a weapon, item of equipment, or system of approved

specific characteristics that is operated by an adequately trained, equipped, and supported military unit or force.

AP1.1.55. Initial Spares. Spares stocked to support a newly fielded weapon system or a modification of a weapon system.

AP1.1.56. Insurance Item. A non-demand-based, stocked, essential item for which no failure is predicted through normal usage. However, if a failure were to be experienced, or a loss should occur through accident, abnormal equipment or system failure, or other unexpected occurrence, lack of replacement item will seriously hamper the operational capability of a weapon system.

AP1.1.57. Integrated Knowledge Environment (IKE). An information environment composed of business, enterprise, and process applications geared toward total knowledge system interoperability to achieve a minimal logistics footprint. Sample business constructs, include:

AP1.1.57.1. Requirements determination and stockage decisions based on situational awareness/performance criteria.

AP1.1.57.2. Minimal financial transactions to point of sale.

AP1.1.57.3. Supply chain visibility available end to end.

AP1.1.58. Integrated Materiel Manager (IMM). Any DoD activity or Agency that has been assigned integrated wholesale materiel management responsibility for the Department of Defense and participating Federal Agencies. Integrated wholesale materiel management responsibilities include requirements determination, procurement, distribution, overhaul and repair of reparable materiel, and disposal of materiel.

AP1.1.59. Interchangeable and Substitutable (I&S) Family. Two or more items having an interchangeable and/or substitutable relationship with one another. The head of the family is called the master item; i.e., an item with an interchangeable or substitutable relationship with every member of the family.

AP1.1.60. Interchangeable Item. An item that possesses such functional and physical characteristics as to be equivalent in performance, reliability, and maintainability, to another item of similar or identical purposes, and is capable of being exchanged for the other item without selection for fit or performance, and without alteration of the item itself or of adjoining items, except for adjustment.

AP1.1.61. Intermediate Supply. Intermediate supply refers to any level of inventory between the consumer and wholesale level of inventory and is considered a retail level. The terms "intermediate supply," "intermediate level of inventory," and "retail intermediate echelon" are synonymous.

AP1.1.62. Intransit Assets. Materiel that is between storage locations, either wholesale or retail, or materiel shipped from vendors after acceptance by the U.S. Government, but not yet received by the inventory manager. Intransit assets are not included in the records of wholesale inventory used in the stratification process.

AP1.1.63. Inventory. Materiel, titled to the U.S. Government, held for sale or issue, held for repair, or held pending transfer to disposal.

AP1.1.64. Inventory Control Point (ICP). An organizational unit or activity within the DoD supply system that is assigned the primary responsibility for the materiel management of a group of items either for a particular Military Service or for the Department of Defense as a whole (Joint Pub 1-02, reference (bq)). In addition to IMM functions, an ICP may perform other logistics functions in support of a particular Military Service or for a particular end item (e.g., centralized computation of retail requirements levels and engineering tasks associated with weapon system components).

AP1.1.65. Item Essentiality. A measure of an item's military worth in terms of how its failure (if a replacement is not immediately available) would affect the ability of a weapon system, end item, or organization to perform its intended functions. In stockage models, it is the number by which the shortage cost parameter is multiplied to reflect the differences in military worth among items.

AP1.1.66. Item Identification. Sufficient data to establish the essential characteristics of an item that give the item its unique character and differentiate it from other supply items.

AP1.1.67. Item Management Coding. The process of determining whether items of supply in FSCs for Integrated Materiel Management qualify for management by the individual DoD Components other than the DLA or the GSA.

AP1.1.68. Life-Cycle Cost. The total cost to the U.S. Government of acquiring and owning a system over its useful life. It includes the cost of developing, acquiring, supporting, and disposing of it.

AP1.1.69. Life-of-Type (LOT) Buy. A one-time procurement, when all cost-effective and prudent alternatives have been exhausted, for the total future

requirement of an item that is no longer expected to be produced. The procurement quantity shall be based upon demand or engineering estimates of mortality sufficient to support the applicable equipment until phased out.

AP1.1.70. Limited-Demand Item. A demand-based item for which usage is anticipated, but the item does not meet the established economic stockage criteria, or an item for which the computed demand-based quantity is less than the authorized stockage level. Although limited-demand items fail the economic criteria for demand-based stockage because the probability of demand is low, they qualify as an MME code I, II, or III because the lack of a replacement item would seriously hamper the operational readiness of a weapon system.

AP1.1.71. Logistic Reassignment. The transfer of integrated materiel management responsibilities from one manager to another.

AP1.1.72. Materiel. All items (including ships, tanks, self-propelled weapons, and aircraft; etc., and related spares, repair parts, and support equipment, but excluding real property, installations, and utilities) necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes (Joint Pub 1-02, reference (bq)). Materiel is either serviceable (i.e., in an issuable condition) or unserviceable (i.e., in need of repair to make it serviceable).

AP1.1.73. Materiel Management. Continuing actions relating to planning, organizing, directing, coordinating, controlling, and evaluating the application of resources to ensure the effective and economical support of military forces. It includes provisioning, cataloging, requirements determination, acquisition, distribution, maintenance, and disposal. The terms "materiel management," "materiel control," "inventory control," "inventory management," and "supply management" are synonymous.

AP1.1.74. Maintenance Replacement. The replacement of an unserviceable reparable item by a serviceable item. In that context, unserviceable items shall include items that are replaced due to malfunction or shall have reached the end of an administratively determined removal interval for preventive maintenance or safety considerations.

AP1.1.75. Management Control Activity (MCA). A DoD Component, DoD activity, or non-DoD activity, if participating by separate agreement (e.g., the Coast Guard), designated to receive, screen, and validate Military Service-initiated and contractor-initiated requisitions for GFM from the wholesale supply system to support DoD contracts or requirements.

AP1.1.76. Marking. The application of legible numbers, letters, labels, tags, symbols, or colors to ensure proper handling and identification during shipment and storage.

AP1.1.77. Materiel Condition. A classification of materiel that reflects its readiness for issue and use or to identify the action underway to change the status of materiel.

AP1.1.78. Materiel Denial. A transaction notifying the IMM that there is insufficient materiel in storage to satisfy, in total or in part, the quantity directed for issue and specifying the quantity that may not be issued.

AP1.1.79. Materiel Obligation. A materiel obligation is that unfilled portion of a requisition (for a stocked or a nonstocked item) that is not immediately available for issue, but is recorded as a commitment for future issue. The terms "materiel obligation" and "back order" are synonymous.

AP1.1.80. Materiel Release Order (MRO). An order issued by an accountable supply system manager (usually an inventory control point or accountable depot and/or stock point) directing an non-accountable activity (usually as storage site or materiel drop point) within the same supply distribution complex to release and ship materiel (Joint Pub 1-02, reference (bq)).

AP1.1.81. Material Shortage. Lack or shortage of any raw, in process, or manufactured commodity, equipment, component, accessory, part, assembly, or product of any kind.

AP1.1.82. Military Mission Essentiality (MME). A code indicating the composite effect of an item on the overall military mission based on the most critical significant application of the item. It shall be used in determining resource allocations, determining degree of management intensity, and communicating essentiality among the DoD Components. (See Appendix 3 for detailed description of MME codes.)

AP1.1.83. Military Packaging. The methods and materials described in Federal or military specifications, standards, drawings, or other authorized documents or systems designed to prevent damage or deterioration during distribution or storage of materiel.

AP1.1.84. Minimum Replacement Unit (MRU). The minimum quantity of an item normally replaced during a maintenance action, often the quantity of a component used for each end item.

AP1.1.85. Model. A mathematical representation of an operation or management system capable of manipulation to achieve optimum solutions to stated problems.

AP1.1.86. Modification. A Government-approved change in the configuration of a part or item that offers a significant benefit to the Government by correcting deficiencies, satisfying a change in operational or logistic support requirements, or effecting a substantial life-cycle cost savings.

AP1.1.87. Multi-echelon Readiness-Based Sparing Models. Mathematical models capable of computing the optimal range and depth of spare and repair parts at both wholesale and retail levels to achieve a weapon system readiness goal for the least cost or to maximize readiness for a fixed cost.

AP1.1.88. National Item Identification Number (NIIN). The last 9 digits of the NSN that differentiates each individual supply item from all other supply items. The first 2 digits signify the National Codification Bureau that assigned the NIIN, while the last 7 digits are nonsignificant and are sequentially assigned by the FLIS. All U.S. manufactured items have a National Codification Bureau Code of "00" (cataloged before 1975) or "01" (cataloged in 1975, or later).

AP1.1.89. National Stock Number. A 13-digit stock number used to identify items of supply. It consists of a 4-digit FSC and a 9-digit NIIN (Joint Pub 1-02, reference (bq)).

AP1.1.90. Non-Demand-Based. A requirements determination process that is not based on forecasted demand, but qualifies stockage based on other criteria. Types of non-demand-based stockage are insurance stockage, life-of-type buys, and program-based buys.

AP1.1.91. Not Stocked. An item for which there is no established Requirements Objective (RO). Inventory or usage data may be present; however, stock replenishment would not be initiated.

AP1.1.92. Operating Level (OL) of Supplies. The quantities of materiel required to sustain operations in the interval between replenishment shipments. The terms "OL of supplies" and "operating stocks" are synonymous.

AP1.1.93. Order and Shipping Time (OST) Level. The quantities of materiel required to sustain operations during the interval between the time that an activity initiates a replenishment requisition and the time the activity receives the requisitioned materiel.

AP1.1.94. Order-to-Receipt Time. The time period extending from the date of a requisition until the date that the materiel is recorded on the receiving activity's inventory records or as otherwise shown on the receiving activity's material receipt acknowledgement when the receiving activity is not posting the materiel it received to inventory.

AP1.1.95. Organic Support. The capability of a Military Service or a Defense Agency to sustain logistics operations through U.S. Government organizational structures.

AP1.1.96. Performance-Based Agreement. A written agreement between the support provider and the customer, with the fulfillment agent, that describes measurable service and performance-level parameters based on customer requirements and expectations.

AP1.1.97. Performance-Based Logistics (PBL). The preferred DoD approach for product support for DoD systems. PBL is the purchase of support as an integrated, affordable performance package designed to optimize system readiness and meets performance goals for a weapon system through long-term support arrangements with clear lines of authority and responsibility. Also, PBL is designed to allow the user -- the Force Provider -- to negotiate and purchase a package of support structured to meet operational requirements.

AP1.1.98. Phased Support. A contractor support approach to provide interim support for new acquisitions with a commitment to attain organic capability. Phasing may be done by support level (e.g., organization, intermediate, or depot), by subsystem, by design-stable components, or other criteria.

AP1.1.99. Planned Program Stocks. Quantities of an item needed over and above recurring requirements to meet approved programs of a nonrecurring or a sporadic nature (e.g., set assembly and non-repetitive overhaul programs) for which requirements may not be predicted by normal forecasting methods.

AP1.1.100. Potential Reutilization and/or Disposal Materiel. DoD Component materiel identified by an item manager for possible disposal, but with potential for reutilization; or materiel that has the potential for being sent by an item manager to the DRMS for possible reutilization by another DoD Component or by a Federal, State, or local governmental agency, or for disposal through sale to the public.

AP1.1.101. Potential Security Assistance Materiel. Materiel that supports weapon systems phased out, or in the process of being phased out, of use by the Department of

Defense, but temporarily held for programs authorized by the "Foreign Assistance Act of 1961," as amended (40 USC. 512(a), reference (am)), and the "Arms Export Control Act of 1976," as amended (DoD 4160.21-M-1, reference (al)), or other related statutes by which the Department of Defense provides materiel by grant, credit, or cash sales in furtherance of National policies and objectives.

AP1.1.102. Precious Metals. FSC 9660 items that are gold, silver, platinum, or palladium granulation and sponges, rhodium, ruthenium, iridium, and osmium recovered from items, such as photographic and x-ray film, spent photographic fixing solution, military accouterments, such as insignia, crucibles, special wires, silver cell batteries, missile and electronic scrap, turnings, desalter kits, brazing alloys, solder, and dental scrap.

AP1.1.103. Preliminary Operational Capability. The attainment of the capability for equipment or systems to be used by operational units and to function in a manner that is preliminary to, but in support of, the achievement of an IOC.

AP1.1.104. Preservation. The processes and procedures used to protect materiel against corrosion, deterioration, and physical damage during shipment, handling, and storage; application of protective measures, including cleaning, drying, preservative materials, barrier materials, cushioning, and containers when necessary.

AP1.1.105. Principal Item. An end item or a replacement assembly of such importance to operational readiness that management techniques require centralized individual item management throughout the supply system to include items stocked at depot level, base level, and using unit level.

AP1.1.106. Priority Designator (PD). A 2-position numeric code (01-15) that identifies the relative priority of the competing requisitions. As an integral part of the UMMIPS, it is used by the materiel management systems to allocate available stocks among competing requisitions and is based on the combination of the F/AD assigned to the requisitioning activity and the urgency of need, as prescribed in DoD 4000.25-1-M (reference (r)).

AP1.1.107. Product Support Integrator (PSI). The integrator of required logistical support processes to ensure that level of support is obtained through PBL agreements. The designated PSI for a given PBL arrangement may be an Original Equipment Manufacturer (OEM), a commercial (private) entity, a Government (organic) entity, or a combination of a public/private partnership.

AP1.1.108. Production Lead Time (PLT). The time interval between the letting of a contract or the placing of an order, and receiving the purchased materiel into the supply system.

AP1.1.109. Program Objective Memorandum (POM). The POM documents a 6-year projected blueprint of each organization's proposals for updating DoD programs. Each Military Department, Defense Agency, and Special Operations Command submits it to the Secretary of Defense for approval. The approved POM defines the programs to be supported in the Military Department and the Defense Agency budgets.

AP1.1.110. Property Accountability. The assignment of duties and responsibilities to an individual or organization that mandates jurisdiction, security, and answerability over public property.

AP1.1.111. Property Accountability Record. The official record of tangible personal property, including inventory, owned by the Department of Defense that is maintained to identify the quantities of items on-hand, unit prices, locations, physical condition, receipt and issue records, authorized stock numbers, item descriptions, and other such information necessary to properly account for materiel and exercise other inventory management responsibilities.

AP1.1.112. Provisioning. The management process of determining and acquiring the range and quantity of support items necessary to operate and maintain an end item of materiel for an initial period of service.

AP1.1.113. Quantity Unit Pack. The number of units of issue bound or packaged in a unit pack.

AP1.1.114. Readiness. A measure or measures of the ability of a system to undertake and sustain a specified set of missions at planned peacetime and wartime utilization rates. Measures take account of the effects of system design (reliability and maintainability), the characteristics of the support system, and the quantity and location of support resources. Examples of system readiness measures are combat sortie rate, fully mission capable rate, and operational availability.

AP1.1.115. Readiness-Based Requirements. A requirement determination process that has a goal targeted at weapon system readiness.

AP1.1.116. Reason for Stockage Category (RSC). The categorization of an item that indicates the reason or basis for stockage at the retail level of inventory. Those

categories reflect the stockage computation or decision rule applicable, and in some cases are used for inventory stratification and supply management purposes.

AP1.1.117. Receiving. All actions taken by a receiving activity from the physical turnover of materiel by a carrier until the on-hand balance of the accountable stock record file or in-process receipt file is updated to reflect the received materiel as an asset in storage, or the materiel is issued directly from receiving to the customer.

AP1.1.118. Reclamation. The process of reclaiming required serviceable and economically repairable components and material from excess or surplus property for return to the proper supply activity, whereas the residue is processed as "disposable property."

AP1.1.119. Reorder Point (ROP). The point that, when an item's inventory position (i.e., on-hand stock plus stock due-in minus stock due-out) reaches or breaches, triggers an order to replenish stock.

AP1.1.119.1. Retail ROP. That point at which a stock replenishment requisition shall be submitted to maintain the predetermined or calculated stockage objective. For demand-based computations, the reorder point equals the sum of the safety level of supply, the level for ordering and shipping time, repair-cycle level (for reparable items), and authorized additive levels.

AP1.1.119.2. Wholesale ROP. That point at which a procurement action shall be initiated to replenish stock to the predetermined or calculated requirements objective. For demand-based computations, the reorder point equals the sum of the safety level of supply, the level for acquisition time, repair-cycle level (for reparable items), and authorized additive levels.

AP1.1.120. Repair-Cycle Level. The quantity of reparable items required to sustain operations during the repair cycle that commences when a maintenance replacement takes place and ends when the unserviceable asset is returned to stock in a serviceable condition. That includes such stages as removed, awaiting shipment, in transit, in pre-repair screening, in process of repair, and being returned to serviceable stock. Any extraordinary awaiting-parts delays and any intentional extended-transit, storage, or repair-process delays should be excluded from the repair cycle.

AP1.1.121. Reparable Item. An item of supply subject to economical repair and for which the repair (at either depot or field level) is considered in satisfying computed requirements at any inventory level.

AP1.1.122. Replenishment. Actions to resupply an inventory when the inventory position reaches the reorder point.

AP1.1.123. Representative Procurement. A procurement for replenishing wholesale-level stock, such that the procurement action is routine in nature or the circumstances affecting the procurement are expected to occur on a continuing basis.

AP1.1.124. Required Delivery Date (RDD). A 3-position field that is used to identify the level of service (in terms of time) that a customer requires of the logistics system. The RDD specifies the allotted times that each element of the logistics system has to satisfy the service-level required by the customer. The logistics management systems use the RDD to determine the service-level times that must be met or exceeded and allocate their resources, accordingly. The criteria for determining the RDD are in DoD 4000.25-1-M (reference (r)).

AP1.1.125. Requirements Computation. Any mathematical calculation performed to support requirements determination functions.

AP1.1.126. Requirements Objective. For wholesale stock replenishment, the maximum authorized quantity of stock for an item. It consists of the sum of stock represented by the economic order quantity, the safety level, the repair-cycle level, and authorized additive levels.

AP1.1.127. Requisition. An order for materiel initiated by an established, authorized organization (i.e., a DoD or non-DoD organization that has been assigned a DoD Activity Address Code) that is transmitted either electronically, by mail, or telephoned to a supply source within the Department of Defense or external to the Department of Defense (the General Services Administration (GSA), the Federal Aviation Administration (FAA), or other organizations assigned management responsibility for categories of materiel), according to procedures specified in DoD 4000.25-1-M (reference (r)).

AP1.1.128. Requisition Response Time. The mean time between the date that the wholesale ICP receives a requisition and the date ready-for-issue assets are available to satisfy the requisition.

AP1.1.129. Requisitioning Objective. The maximum quantity of materiel to be maintained on hand and on order to sustain current operations and core war reserves. It shall consist of the sum of stocks represented by the operating level, safety level, repair cycle, if applicable, the OST level, and authorized additive levels.

AP1.1.130. Resupply Time. The mean time between the date a retail activity submits a requisition to the wholesale system and receives the requisitioned materiel.

AP1.1.131. Retail. Level of inventory below the wholesale level, either at the consumer level (directly supporting customers) or at the intermediate level (supporting a geographical area).

AP1.1.132. Retail Inventory Manager. Any inventory manager of either a consumer or intermediate level of inventory.

AP1.1.133. Retail-Level Supply. Those secondary items stored within DoD intermediate and consumer levels of supply down to and including these activities: the Army -- to Authorized Stockage List; the Navy -- to shipboard and shore stations; the Air Force -- to base supply; and the Marines -- to base supply and the Marine Expeditionary Force supplies. Retail-level supply does not include end use secondary item materiel.

AP1.1.134. Retail Stock. Stock held in the custody or on the records of a supply organization below the wholesale level.

AP1.1.135. Retention Limit. The maximum quantity of on-hand materiel that may be retained in stock, as applicable retention rules determine.

AP1.1.136. Safety Level. The quantity of materiel required to be on hand to permit continued operation in the event of a minor interruption of normal replenishment or a fluctuation in demand.

AP1.1.137. Secondary Item. An item that is not defined as a principal item and includes reparable components, subsystems, and assemblies, consumable repair parts, bulk items and material, subsistence, and expendable end items, including clothing and other personal gear.

AP1.1.138. Shelf-Life Code. A code assigned to identify the time period beginning with the date of manufacture, cure, assembly, or pack and terminated by the date by which an item shall be used (expiration date) or subjected to inspection, test, restoration, or disposal action (DoD 4140.27-M, reference (f)).

AP1.1.139. Shelf-Life Item. An item of supply possessing deteriorative or unstable characteristics to the degree that a storage time period shall be assigned to ensure that it shall perform satisfactorily in service.

AP1.1.140. Single Manager for Conventional Ammunition. The responsibility the Secretary of Defense assigns the Secretary of the Army for the procuring, producing, supplying, and maintaining, and/or renovating conventional ammunition within the Department of Defense. Specific responsibilities, functions, authorities, and relationship are set forth in DoD Directive 5160.65 (reference (br)).

AP1.1.141. Stock Fund. A revolving fund established to finance the costs of inventories of supplies. It is authorized by specific provision of law to finance a continuing cycle of operations. Reimbursements and collections derived from such operations are available for use by the fund without further action by the Congress (Joint Pub 1-02, reference (bq)).

AP1.1.142. Storage Activity. The organization element of a distribution system that is assigned responsibility for the physical handling of materiel incident to its check-in and inspection (receipt), its keeping and surveillance in a warehouse, shed, tank, or open area (storage), and its selection and shipment (issue).

AP1.1.143. Stratification Process. A uniform portrayal of requirements and assets application that is a computer-generated, time-phased simulation of actions causing changes in the supply position; e.g., procurement, repair, receipt, issue, termination, and disposal of materiel.

AP1.1.144. Substitutable Item. An item possessing functional and physical characteristics that make it capable of being exchanged for another only under specified conditions or for particular applications and without alteration of the items themselves or of adjoining items. That term is synonymous with the phrase "one-way interchangeability," such as item B shall be interchanged in all applications for item A, but item A shall not be used in all applications requiring item B.

AP1.1.145. Supply Chain Operations Reference Model (SCOR). A commercially based supply chain integration model used to describe business activities associated with all phases of satisfying a customer demand. The model is organized around the five primary management processes of Plan, Source, Make/Maintain, Deliver, and Return. By describing supply chains using these building blocks, the model may be used to describe supply chains that are very simple or very complex using a common set of definitions.

AP1.1.146. Supply Pipeline. The link from the end-user to the retail level to the wholesale level of supply through which requisitions and materiel normally flow.

AP1.1.147. Supply Source. Any Federal Government organization exercising control of materiel and to which requisitions are directed.

AP1.1.148. Supply Support Request (SSR). A transaction identifying requirements for consumable items that is submitted by the DoD Component introducing a materiel and/or weapon system to the IMM.

AP1.1.149. Supply System Responsiveness. Reflects the ability of the supply and transportation systems to obtain and deliver an item of supply to the requesting customer within required timeframes.

AP1.1.150. Surplus Property. Any property the General Service Administration determines Federal Agencies, including the Department of Defense, do not require for their needs and to discharge their responsibilities.

AP1.1.151. System Acquisition. Process of providing a new or improved materiel capability in response to a validated need.

AP1.1.152. System Acquisition Program. A directed, funded effort that is designed to provide a new or improved materiel capability in response to a validated need.

AP1.1.153. Time-Definite Delivery (TDD). The concept that, within a specified degree of probability (e.g., 85 percent) the logistics system is capable of delivering required materiel to the customer within a given period of time (DoD Instruction 4140.61, reference (b)).

AP1.1.154. Total Asset Visibility (TAV). The capability to provide timely and accurate information on the location, movement, status, and identity of units, personnel, equipment, and supplies. It also includes the capability to act on that information to improve the overall performance of DoD logistics practices.

AP1.1.155. Total Item Property Record. The record or record set maintained by the IMM that identifies the quantity, condition, and value of the item assets for each organizational entity having physical custody of those assets. The total item property record includes materiel that is due in, in transit, in organic wholesale repair facilities, in a contractor's custody, on loan, on-hand in wholesale distribution centers, on-hand at retail activities, and for reported assets in the custody of users.

AP1.1.156. Total Item Record. The portion of the FLIS data bank containing all available information for the identification and logistical support of items with an NSN.

AP1.1.157. Total Life-Cycle System Management (TLCSM). When a designated program manager implements, manages, and oversights all activities associated with the acquisition, development, production fielding, sustainment, and disposal of DoD weapon systems across its life cycle.

AP1.1.158. Total Variable Cost. The sum of the variable cost-to-order, variable cost-to-hold, and implied shortage cost. Procurement cycles and safety levels are determined through minimizing these costs for any given group of items in an inventory.

AP1.1.159. Uniform Materiel Movement and Issue Priority System (UMMIPS). A structure that establishes time standards, based on the mission and urgency of need of the requestor, for the supply of materiel from the date of the requisition to the time that the acknowledgment of physical receipt is posted to the requisitioner's inventory record.

AP1.1.160. Unit of Issue. Denotes by what means we buy and ultimately issue materiel for our end-users and/or customers. Depending on the item, unit of issue may be quantity or physical measurement, or by container or shape of the item. Unit of issue is standard for each item of supply across the Department of Defense.

AP1.1.161. Variable Cost-to-Hold. Those costs associated with the cost of capital, inventory losses, obsolescence, storage, and other variable costs of maintaining an inventory. Costs are considered "fixed" and not part of the variable cost if they remain constant if 50 percent of the work load were eliminated.

AP1.1.162. Variable Cost-to-Order. Those costs associated with determining the requirement to order, processing of a purchase request, and subsequent contract actions through receiving the order into the ICP system. Costs are considered "fixed" and not part of the variable cost if they remain constant if 50 percent of the workload were eliminated.

AP1.1.163. Weapon System Availability. A weapon system is available if it is capable of performing its intended mission.

AP1.1.164. Wholesale. The highest level of organized DoD supply, and as such, procures, repairs, and maintains stocks to resupply the retail levels of supply. The terms "wholesale supply," "wholesale level of supply," and "wholesale echelon" are synonymous.

AP1.1.165. Wholesale Stock. Stock, regardless of funding sources, over which the IMM has asset knowledge and exercises unrestricted asset control to meet worldwide inventory management responsibilities.

AP1.1.166. Zoned Locations. Assignment of areas within a storeroom or warehouse to allow for the subdividing of a picking list for more efficient and rapid order picking.

AP2. APPENDIX 2

PROVISIONING DATA AND ORGANIC REQUIREMENTS PROCEDURES

AP2.1. PROVISIONING DATA PROCEDURES

AP2.1.1. Provisioning data shall be acquired to:

AP2.1.1.1. Assign Source, Maintenance, and Recoverability (SMR) coding, according to section C2.3., above.

AP2.1.1.2. Do provisioning screening.

AP2.1.1.3. Review for parts standardization.

AP2.1.1.4. Review for potential interchangeability and substitutability.

AP2.1.1.5. Assign item management codes (IMCs). Uniform IMCs shall be assigned to support items during provisioning, as prescribed in Volume 6 of DoD 4100.39-M (reference (at)).

AP2.1.1.6. Prepare item identifications for assigning NSNs.

AP2.1.1.7. Prepare allowance and issue lists.

AP2.1.1.8. Determine requirements.

AP2.1.1.9. Procure for initial support.

AP2.1.2. The EDFP shall be tailored by the provisioning activity to get product engineering drawings or commercial drawings.

AP2.1.3. For joint Military Service acquisition programs, uniform PTD and EDFP requirements should be established. The materiel manager of the lead DoD Component shall coordinate provisioning requirements with the supporting DoD Components so that unnecessary duplication of data, formats, procedures, and operations is avoided.

AP2.1.4. Digital format is the preferred method for generating and accepting the PTD and the EDFP.

AP2.1.5. For Nondevelopmental Items (NDI), contractor commercial data products should be used to the maximum extent possible to satisfy provisioning data

requirements. Whenever possible, materiel managers should adopt commercial-off-the-shelf software to exchange product data and adopt commercial product data exchange standards as they develop.

AP2.2. PROVISIONING PROCEDURES FOR ORGANIC REQUIREMENTS

AP2.2.1. General

AP2.2.1.1. Requirements for provisioned items shall be computed using the latest end item program or delivery data and projected mature maintenance replacement rates.

AP2.2.1.2. Calculated risks may be taken during the provisioning period by deferring procurement of partial quantities of computed requirements for selected spare and repair parts when program uncertainties or other circumstances make such risks acceptable in the context of available resources and readiness goals.

AP2.2.1.3. The DoD Components shall retain documentation that portrays how contractor and Government factors were evaluated and used in determining provisioning requirements.

AP2.2.1.4. Provisioning requirements based on engineering data shall extend through the demand development period (DDP) for an item, which is the period of time extending from the initial date of organic supply support for a new end item to a point in time when requirements can be forecasted using actual demands. (See paragraph AP2.2.3., below, for more on DDP.)

AP2.2.1.4.1. The expected initial date of organic supply support is equal to the preliminary operational capability date of the weapon system plus the expected time until first demand (based on reliability of item). For items only used in depot-level repair of a higher assembly, the expected date should be the first scheduled date for depot-level repair of the higher assembly.

AP2.2.1.4.2. The DDP should be minimized to no more than 1 year when representative operating time exists, and should not normally exceed 2 years. If sufficient representative operating time has not been accumulated at the end of this period to adjust the demand forecast, an evaluation may be made to extend the DDP up to 3 more years, for a total DDP of 5 years.

AP2.2.1.5. Contractors may be requested to give recommendations on the range and quantity of support items required.

AP2.2.1.6. When an established item is managed by a DoD Component other than the provisioning one, the DoD Component using the item shall register the requirement with the IMM by submitting Supply Support Requests (SSRs) for consumable items, according to DoD 4140.26-M (reference (n)), and by submitting Nonconsumable Item Materiel Support Requests (NIMSRs) for repairable items, according to AMC-R 700-99/NAVSUPINST 4790.7/AFMCR 400-21/MCO P4410.22C.¹⁶

AP2.2.1.7. The SSR and NIMSR process is designed to provide IMM with an estimate of the time-phased requirements necessary to support weapon systems as they are activated. To this end, the SSRs and NIMSRs submitted to the IMM should be provided with a forecasted 12-month requirement, identify how the requirement is computed, and be based on average program requirements during the DDP. The IMM shall only adjust requirements provided by the using DoD Components on the basis of affordability. Such adjustments shall reflect the dollar savings resulting from the change and the impact on system/equipment readiness.

AP2.2.2. Demand-based methodologies may be used for non-weapon system support provisioning, where readiness requirements for systems or end items are not stated, where data is not available for input to RBS models, or where the application of RBS approaches is not cost-effective. Those methodologies are categorized as "demand based" because the forecast of annual demands forms the basis for determining that stockage is economical at respective support levels.

AP2.2.2.1. When using demand-based sparing processes, an approach of minimizing the costs of achieving a targeted supply performance goal shall be used.

AP2.2.2.2. Total provisioning stockage computed by demand-based methodologies shall not exceed 1-year's worth of projected demand at each echelon in question.

AP2.2.2.3. When using demand-based methodologies, safety-level quantities are not authorized for provisioning.

AP2.2.2.4. Items for which anticipated demands are insufficient to justify stockage on an economic basis shall not be stocked unless required as limited-demand or insurance items. (See paragraph C2.6.5., above.)

¹⁶ Joint issuance AMC-R 700-99/NAVSUPINST 4790.7/ AFMCR 400.21/MCO P4410.22C, "Wholesale Inventory Management and Logistics Support of Multi-Service Used Nonconsumable Items," April 27, 1990, can be found at website <http://www.nll.navy.mil/nll/filedetail.cfm?id=1041>.

AP2.2.3. Demand Development

AP2.2.3.1. During the DDP, new-item demand is forecasted using an engineering estimate because representative operating time is not yet sufficient to adjust this estimate with historical data. Once representative operating time is sufficient (the DDP has ended), the weight on the engineering estimate shall decrease. The objective of that procedure is to ensure that increasing consideration is given to actual demand data, as opposed to provisioning estimates.

AP2.2.3.2. When interim contractor support (ICS) is employed, materiel managers shall identify the necessary usage data to be collected by the contractor and delivered to the Government in a format compatible with the automated system used in the Government's requirements determination process. The contractor's usage data, rather than engineering estimates, shall be used to forecast replenishment spare and repair parts requirements when considered representative. Possession of the contractor's usage data may eliminate the need to establish a DDP upon transition to organic support. The DDP could actually occur during the ICS.

AP2.2.3.3. Preferably the DDP should be measured against an equipment operating standard (hours, miles, and rounds; etc.) instead of calendar time. If that is not possible, a traditional calendar-based DDP may be employed.

AP2.2.3.4. Whether using a calendar-based or operating standard-based DDP, once sufficient representative operating time exists to adjust demand forecasts (or after 5 years, the maximum DDP), stockage, requirements, and retention should be based on actual usage data.

AP2.2.3.5. The DoD Components shall develop methodologies for statistically validating actual usage experienced during the DDP. In the event the actual usage data is judged to not be statistically valid, the materiel manager shall continue to base demand estimates for replenishment on both engineering estimates and actual usage data until statistically valid data is obtained.

AP2.2.3.6. After the DDP for support items is completed, increases in end item density or operating usage should not be the basis for further procurement of initial spares. Those requirements should be considered replenishment spares and should be satisfied using the requirements process outlined in section C2.6., above.

AP3. APPENDIX 3

RETAIL REASON FOR STOCKAGE CATEGORY CODES

AP3.1.1. All secondary items held at retail supply activities shall be assigned a Reason for Stockage Category (RSC) code that identifies the stockage rules applicable to each item. That categorization shall apply to inventory held at retail supply activities without regard to the funding sources for the inventory.

AP3.1.2. Item records shall record the applicable RSC for each item held. The RSC for an item shall be reviewed at least annually prior to the development of the annual budget submission.

AP3.1.3. These categories (codes) apply:

AP3.1.3.1. Stocked Readiness (SR). This demand-supported RSC is for an item that has readiness-based requirements levels.

AP3.1.3.2. Stocked Demand (SD). This demand-supported RSC is for an item that has demand-based requirements levels.

AP3.1.3.3. Stocked Limited Demand (SL). This demand-supported RSC is for an item that has limited-demand requirements levels because anticipated usage for the item is not enough to warrant demand-based requirements levels.

AP3.1.3.4. Stocked Insurance (SI). This non-demand-supported RSC is for an essential item for which replacement is not anticipated as a result of normal usage and for which an unacceptable lead time (procurement or order and shipping time) has been established. If failure is experienced, or loss occurs, through accident, abnormal equipment or system failure, or other unexpected occurrences, the lead time required to obtain a replacement would seriously hamper the operational capability of a critical facility or weapon system.

AP3.1.3.5. Stocked Provisioning (SP). This non-demand-supported RSC is for an item specifically stocked to support a newly introduced end item for that period of time until requirements are forecast entirely upon actual demands. That period may not exceed 2 years after actual demand is experienced. The established RO is based upon the asset positioning policy and anticipated usage developed during the provisioning process.

AP3.1.3.6. Stocked War Reserve Stock (SW). This categorization is to identify stock that is specifically held to support a wartime requirement. The stock for an item can be divided between that categorization and any other demand-supported or non-demand-supported RSC.

AP3.1.3.7. Not Stocked (NS). This categorization is for an item for which there are no established requirements levels. Inventory or usage data may or may not be present; however, orders placed on sources of supply are to satisfy materiel obligations to customers and not to replenish stock.

AP3.1.3.8. Other (NK). This categorization is meant to be a temporary categorization until another RSC is assigned.

AP3.1.4. Within their materiel management systems, the DoD Components may use any data element or combination of data elements to delineate inventory levels according to paragraph AP3.1.3., above.

AP4. APPENDIX 4

ESSENTIALITY MATRIX

AP4.1. MILITARY MISSION ESSENTIALITY (MME) CODE

The MME code indicates the composite effect of a secondary item on overall military mission based on the hierarchical relationships, as applicable, of the weapon system or end item to the military mission of the using activity, of the assembly or component to the weapon system or end item, and of the secondary item to the assembly or component. The four levels of MME are:

AP4.1.1. Code I. Most essential to military mission.

AP4.1.2. Code II. Highly essential to military mission.

AP4.1.3. Code III. Less essential to military mission.

AP4.1.4. Code IV. Not essential to military mission.

AP4.2. WEAPON SYSTEM OR END ITEM ESSENTIALITY CODE

That code indicates whether the weapon system or end item is essential to the military mission of the Military Service. The Military Services shall specify the essentiality of their weapon systems and end items using these codes:

AP4.2.1. Code A - Highest Priority Mission-Essential. Only a limited number of weapon systems should have this designation.

AP4.2.2. Code B - Lower Priority Mission-Essential.

AP4.2.3. Code C - Not Mission-Essential.

AP4.3. ASSEMBLY OR COMPONENT ESSENTIALITY CODE

That code indicates the essentiality of an assembly or component to the performance of the primary or secondary missions of the weapon system or end item. If a weapon system or end item has both primary and secondary missions and the Military Service has a user requirement to distinguish between them, the Military Services should use these codes:

AP4.3.1. Code D - Not Mission Capable. Materiel whose failure shall prevent performance of any wartime and/or peacetime missions; e.g., total loss of mobility, propulsion, or life support; and not safe to fly. If a weapon system or end item does not have primary and secondary missions or the Military Service has no user requirement to distinguish between them, Code D applies.

AP4.3.2. Code E - Severe Degradation of Primary Mission. Materiel whose failure shall severely limit intended or designed primary mission or function.

AP4.3.3. Code F - Not Fully Mission Capable. Materiel whose failure shall render the weapon system or end item incapable of fully performing all missions, although some missions might continue to be performed. That includes total loss or severe degradation of secondary mission.

AP4.3.4. Code G - Fully Mission Capable. Materiel whose failure shall not render the weapon system or end item incapable of performing all of its assigned missions.

AP4.4. ITEM ESSENTIALITY CODE

That code indicates the degree to which the failure of a secondary item that is part of an end item affects the ability of the end item to perform its intended operation. The five levels of item essentiality are:

AP4.4.1. Code 1. Failure of the item shall render the end item inoperable.

AP4.4.2. Code 3. Failure of the item shall not render the end item inoperable.

AP4.4.3. Code 5. Item does not qualify for the assignment of Code 1, but is needed for personal safety.

AP4.4.4. Code 6. Item does not qualify for the assignment of Code 1, but is needed for legal, climatic, or other requirements peculiar to the planned operational environment of the end item.

AP4.4.5. Code 7. Item does not qualify for the assignment of Code 1, but is needed to prevent the impairment of, or the temporary reduction of, operational effectiveness of the end item.

AP4.5. ASSIGNMENT OF A MME CODE

The following matrix displays the combinations of the weapon system and/or end item, assembly and/or component, and item essentiality codes and the corresponding composite MME Code.

WEAPON SYSTEM OR END ITEM ESSENTIALITY CODE		ASSEMBLY OR COMPONENT ESSENTIALITY CODE		MILITARY ITEM ESSENTIALITY CODE		MISSION ESSENTIALITY CODE
A, B, C	+	G	+	all	=	IV
A, B, C	+	D,E,F	+	3	=	IV
A	+	D,E	+	1,5	=	I
A	+	D	+	6,7	=	II
A	+	E	+	6,7	=	III
A	+	F	+	1,5	=	II
A	+	F	+	6,7	=	III
B	+	D,E,F	+	1,5	=	II
B	+	D,E,F	+	6,7	=	III
C	+	D,E,F	+	1,5,6,7	=	IV

AP5. APPENDIX 5

COST ESTIMATING

AP5.1. GENERAL

AP5.1.1. The DoD Components shall include the following two variable costs in their computations of wholesale economic order quantities and intermediate and consumer operating levels:

AP5.1.1.1. Ordering cost.

AP5.1.1.2. Holding cost.

AP5.1.2. Subsequent portions of this Appendix discuss the estimation of each of those costs. Costs may be determined by current industrial engineering studies or by statistical analysis. Where firm data are not available, costs shall be based on estimates, supported by the assumptions used to arrive at each estimate.

AP5.2. COST CHARACTERISTICS

AP5.2.1. Variable Costs. Costs that are to be estimated and included in the stockage computations required by this Appendix are limited to those variable costs (as opposed to fixed costs) listed in paragraph AP5.1.1., above. Only those costs that vary because of a particular stockage rule (e.g., physical inventory costs) are to be considered in estimating the cost of the function. One-time costs (or set-up costs) and fixed costs (those incurred during a process, but not dependent upon the number of times the process is repeated) are to be excluded from the cost computations described in this Appendix.

AP5.2.2. Cost Sensitivity. The extent to which a particular cost; i.e., cost of ordering and holding inventory, influences overall costs may be very slight. The cost's influence is dependent upon the form of the total cost equation and the solution thereto, as well as the relative magnitude of the costs. The practical importance is that minor errors in cost estimation need not be corrected, particularly if extensive effort shall be involved in eliminating or reducing the error.

AP5.3. ORDERING COSTS

Ordering costs are the sum of the administrative expenses involved in procuring or requisitioning and issuing a single lot of one item, regardless of the number of units ordered, their weight, cube, or dollar value.

AP5.3.1. The ordering process begins when the stocking activity decides that additional materiel should be procured or requisitioned for stock. The process ends when the ordered materiel is placed in stock at the requesting activity and the related accounting and record keeping have been accomplished. All intermediate tasks related to the replenishment contribute to the ordering cost.

AP5.3.2. The ordering cost is a function of the procedures used at ordering activities, the degree to which each of the activities is mechanized, and the variation in treatment of certain classes of materiel or types of items.

AP5.3.3. The major tasks involved in ordering include requirements determination, order and/or requisition preparation and recording, receipt processing and stowage of materiel, accounting for the transfer of funds between the ordering activity and the source of supply, and in the case of a retail requisition, issuing from a wholesale distribution depot.

AP5.4. HOLDING COST

AP5.4.1. This cost reflects the expenses incurred to keep inventory for future use. It is expressed as the annual cost for dollar of the average order quantity. Holding costs for unserviceable reparable items need not be considered if it is assumed that local repairs are made one at a time rather than in batches.

AP5.4.2. The cost-to-hold is composed of the sum of the charge for funds invested in inventory, losses due to obsolescence, other inventory losses, and storage costs.

AP5.4.2.1. The annual charge for funds invested in inventory shall be the current rate for long-term Government securities. The DoD Components may use an alternative discount rate if that rate results in a lower overall cost to the Government.

AP5.4.2.2. The costs of losses due to forecast error and obsolescence, including deterioration, are more variable than investment charges. For extremely stable items, the cost is small.

AP5.4.2.2.1. When stocked items are displaced by the implementation of unforeseen equipment improvements or new weapons, a significant allowance for obsolescence may be estimated by dividing the dollar value of secondary item stock transfers to disposal during the year by the value of the average annual on-hand and on-order assets or the average value of the stockage or requisitioning objective, whichever is less.

AP5.4.2.2.2. Since forecasts of losses expected to occur in the future due to obsolescence are merely estimates of what may occur in normal circumstances, unusual losses such as assets generated by sudden deceleration of war activities, or the like, should be excluded.

AP5.4.2.3. Inventory losses vary greatly among individual stocked items and are principally a function of their commercial application, accessibility, size and value. Poor accounting methods may account for some apparent losses. Others are actual physical losses to the inventory. Each DoD Component shall develop that cost on the basis of actual experience. To encourage proper safeguards, an absolute upper limit is initially established, whereby the net inventory adjustment shall not exceed 5 percent of the annual average on-hand inventory value.

AP5.4.2.4. For a fixed-supply point, the cost of storage shall be computed at 1 percent of the value of the inventory contained therein for each year, unless actual variable storage costs are available or there is convincing evidence that a different method should be used.

AP5.4.2.4.1. The assignment of that relatively small value for variable storage costs is applicable because the size and cost of most fixed-supply installations is based on factors other than the amount and the value of the materiel to be stored therein. If the costs associated with those factors do not change if 50 percent of the storage materiel were eliminated, then those costs shall not be part of the variable storage cost.

AP5.4.2.4.2. Mobile activities, on the other hand, can be and are expanded or contracted to store and transport specific inventories. That is particularly true of modular mobile supply points where the size and cost of each module is fixed, but the number of modules required is a direct function of the cubic measurement of materiel stocked. For these activities, storage costs may be significant, and the individual DoD Components should develop them.

AP5.4.3. The computation of total holding cost may be simplified. It is acceptable to derive holding cost by applying a composite percentage to the dollar value of the average annual operating level.

AP5.4.4. To recapitulate, the variable holding costs are established, as follows:

AP5.4.4.1. Investment charge -- variable.

AP5.4.4.2. Forecast error and obsolescence costs -- variable.

AP5.4.4.3. Inventory losses -- variable (5 percent maximum).

AP5.4.4.4. Storage costs -- variable (1 percent maximum for fixed-supply points).

AP5.5. REVIEW AND DOCUMENTATION OF COSTS

AP5.5.1. Ordering costs should be validated annually and updated as applicable wages change. Costs may be readily updated by applying the average percent of increase or decrease in wages to the cost-to-order, since the great majority of ordering costs consist of labor or labor-related elements.

AP5.5.2. Those portions of the cost-to-hold rate that are variable should be reviewed annually and updated as necessary to ensure that such costs reflect current operations.

AP5.5.3. The source of all costs and changes shall be documented, and that information shall be retained by the DoD Component concerned.

AP6. APPENDIX 6

REPAIR-CYCLE TIME

AP6.1. GENERAL

This Appendix describes the repair-cycle time as it applies to the development of time standards that are used in the computation of repair-cycle requirements for reparable secondary items and to the monitoring of actual times against those standards. All time segments of the repair cycle are described and illustrated in this Appendix.

Repair-cycle time is described in terms of the field-repair cycle and the depot-repair cycle, since these are the two mutually exclusive processes by which an unserviceable item is returned to a ready-for-issue (RFI) condition.

AP6.1.1. An unserviceable item repaired at the organizational and/or intermediate level of maintenance has been processed through the field-repair cycle. Field-repair cycle times apply to field-level reparable (FLR) items and may apply to depot-level reparable (DLR) items if they are repaired at the organizational or intermediate level of maintenance.

AP6.1.2. An unserviceable item that was beyond the repair capability of the organizational and/or intermediate level of maintenance and that was repaired at the depot level of maintenance has been processed through the depot-repair cycle. Depot-repair cycle times only apply to DLR items.

AP6.1.3. Condition codes given in DoD 4000.25-2-M (reference (g)) apply to assets as they go through the different stages of the repair cycle.

AP6.2. FIELD-REPAIR CYCLE

AP6.2.1. Beginning. The date the initial request for the repair of an unserviceable item is entered into the supply system as measured by the establishment date of the organizational or intermediate maintenance activity's repair work order.

AP6.2.2. Ending. The date an unserviceable item has been restored to serviceable and issuable condition by the organizational and/or intermediate maintenance activity and is recorded as such on organizational or intermediate supply records, or the date when an unserviceable item is determined to be beyond the repair capability of an organizational and/or intermediate maintenance activity, measured by one of the following:

AP6.2.2.1. The date the organizational or intermediate supply records indicate the repaired item is serviceable and issuable.

AP6.2.2.2. The date of the organizational or intermediate supply activity's turn-in document.

AP6.2.2.3. The closing date of the organizational or intermediate maintenance activity's repair work order.

AP6.3. DEPOT-REPAIR CYCLE

The depot-repair-cycle time is composed of two segments, which are the retrograde time segment (a collective term for the base-processing and in-transit times) and the repair turnaround time segment (a collective term for the transfer-to-maintenance, maintenance shop, and transfer-from-maintenance times). Depot-repair-cycle time excludes awaiting parts (AWP) time, awaiting maintenance (AWM) time, or awaiting carcasses (AWC) time.

AP6.3.4. Retrograde-Time Segment. Retrograde time is the sum of base-processing time and in-transit time.

AP6.3.4.1. Base-processing time begins when an organizational-level and/or intermediate-level maintenance activity determines that it cannot repair the unserviceable DLR and reports that fact to supply; it ends when the asset is ready for shipment from the base and is turned over to transportation.

AP6.3.4.2. In-transit time begins when transportation receives the ready-for-shipment unserviceable DLR and ends when the distribution depot or contractor processes the receipt transaction and the unserviceable DLR is recorded on the records of the inventory control point (ICP).

AP6.3.4.3. The beginning date for retrograde time is measured by one of the following:

AP6.3.4.3.1. The date of the organizational or intermediate supply activity's requisition (turn-in) document number.

AP6.3.4.3.2. The closing date of the organizational or intermediate maintenance activity's repair work order.

AP6.3.4.4. The ending date for retrograde time is measured by one of the following:

AP6.3.4.4.1. The "receipt date" in the transaction that updates the ICP records.

AP6.3.4.4.2. The "receipt date" reported by the commercial or inter-Service depot maintenance activity in its status reports to the ICP.

AP6.3.5. Repair-Turnaround Time Segment. Repair-turnaround time is the sum of transfer-to-maintenance time, maintenance-shop time, and transfer-from-maintenance time. AWC time may occur before or after transfer-to-maintenance time and before maintenance-shop time, but is excluded from both of those times.

AP6.3.5.1. Transfer-to-Maintenance Time. The transfer-to-maintenance time segment begins with the request to pull the unserviceable asset from storage and ends when the organic or contractor maintenance activity receives it. Transfers from depots to contractor facilities include transportation time.

AP6.3.5.1.1. The beginning date is measured by the date of the request to transfer an unserviceable repairable item from the depot's supply activity to an organic or contractor maintenance activity.

AP6.3.5.1.2. The ending date is measured by the date of receipt of the unserviceable DLR item at the organic or contractor maintenance activity.

AP6.3.5.2. Maintenance-Shop Time. The maintenance-shop time segment begins when maintenance receives the unserviceable DLR and ends when the availability of the serviceable asset is formally reported to storage. (AWP and AWM times may occur during the segment, but are excluded.)

AP6.3.5.2.1. The beginning date is measured by one of the following:

AP6.3.5.2.1.1. The date condition code is changed from unserviceable (repairable) to suspended (in work) on the ICP's records.

AP6.3.5.2.1.2. The "in work date" (or "receipt date") reported by the commercial or inter-Service depot maintenance activity if no order is required.

AP6.3.5.2.1.3. The "order date" reported by the commercial or inter-Service depot maintenance activity if an order is required.

AP6.3.5.2.2. The ending date is measured by one of the following:

AP6.3.5.2.2.1. The date the depot maintenance activity reports that the item has been restored to serviceable condition.

AP6.3.5.2.2.2. The date of the DD Form 250 indicating a commercial or inter-Service depot maintenance activity restored the item to serviceable and issuable condition.

AP6.3.5.3. Transfer-from-Maintenance Time. The transfer-from-maintenance time segment begins when the maintenance activity formally reports the availability of the serviceable DLR and ends when the serviceable asset is received in storage and is recorded on the records of the ICP. (Instances where an ICP directs shipment of a repaired asset directly to a customer to fill an outstanding demand should not be included in the development of standards or the monitoring of those standards.) Transfers from contractors' facilities to depots include transportation; transfers to customers do not. Transfer-from-maintenance time does not apply when contractors act as DoD distribution depots, storing materiel and issuing it directly to customers.

AP6.3.5.3.1. The beginning date is measured by one of the following:

AP6.3.5.3.1.1. The date the depot maintenance activity reports that the item has been restored to a serviceable condition; or

AP6.3.5.3.1.2. The date of the DD Form 250 indicating that the contractor has restored the item to a serviceable and issuable condition.

AP6.3.5.3.2. The ending date is measured by one of the following:

AP6.3.5.3.2.1. The date an item's condition code is changed from suspended (in work) to serviceable and issuable on the ICP's records; or

AP6.3.5.3.2.2. The date a depot supply activity receives an item in serviceable and issuable condition from a commercial or inter-Service depot maintenance activity, as recorded on the ICP's records.

AP7. APPENDIX 7

AGREEMENT BETWEEN THE DEPARTMENT OF DEFENSE AND THE GENERAL SERVICES ADMINISTRATION GOVERNING SUPPLY MANAGEMENT RELATIONSHIPS UNDER THE NATIONAL SUPPLY SYSTEM [Facsimile of 1971 Text]

AP7.1. OBJECTIVE AND AUTHORITY

This Agreement is entered into between the Department of Defense (DoD) and the General Services Administration (GSA) in furtherance of the National Supply System concept. DoD and GSA are united in a common objective to eliminate avoidable duplication and overlap between their respective supply systems and those of other federal agencies and to provide responsive, effective and economical integrated materiel management to all Government agencies (civil and military) in commonly used commodities. Basic authorities and responsibilities fixed upon the Administrator of General Services Act of 1949 (40 USC 481) are recognized as the basis of the National Supply System. Under the provisions of Section 205(e) of that Act (40 USC 486), the Administrator of General Services designates and authorizes the DoD to procure and supply personal property and nonpersonal services and perform related functions in support of federal civil agencies within the terms of this Agreement; the Assistant Secretary of Defense (Installations and Logistics) consents to the assignment of the above stated functions.

AP7.2. COMMODITY ASSIGNMENT CRITERION, REVIEW AND TRANSFER PROVISIONS

AP7.2.1. The fundamental rational/criterion for the division of management effort between GSA and the Defense Logistics Agency (DLA),¹⁷ as well as the primary basis for integrated management alignment, is one which:

AP7.2.1.1. Assigns to GSA those Federal Supply Classes (FSCs) or commodities commonly used by Federal agencies which are commercially available on the civilian economy and not predominantly of a military nature; and

¹⁷ The original agreement referred to the Defense Supply Agency, which has since become the Defense Logistics Agency.

AP7.2.1.2. Assigns to DLA those FSCs or commodities commonly used in military operations or weapon systems support, irrespective of their use by civil agencies.

AP7.2.2. FSCs or commodity areas subsequently determined susceptible to integrated management or not previously reviewed will be reviewed against this criterion for appropriate management, for optimum management alignment. To encourage reasonable management stability, however, such reviews, to be conducted jointly by GSA and DLA on an objective basis, shall be limited to intervals approved by the Deputy Under Secretary of Defense for Logistics¹⁸ and the Administrator, GSA. Such changes will normally be made on the basis of overall economies accruing to the Federal Government, except where the change is required in the interest of National security.

AP7.2.3. Time phased plans shall be jointly developed for the assignments and subsequent logistic transfers. The resources, funds and personnel to be transferred shall be identified and determinations developed to achieve the transfers.

AP7.3. EXCLUSIONS

AP7.3.1. Notwithstanding their basic commercial nature, clothing and textiles, subsistence, medical (Federal Supply Group (FSG) 65), fuel and electronics commodities are considered appropriate for management by DLA.

AP7.3.2. Paint and hand tool commodities, notwithstanding the military nature of some of the items and their use in military operations or weapon systems support, are considered appropriate for management by GSA.

AP7.3.3. Automatic data processing equipment and related supplies are excluded as the procurement of these commodities is vested in GSA by law (40 USC 759).

AP7.3.4. Procurement of DoD requirements for commercial non-tactical passenger-carrying vehicles, buses, and trucks is assigned to GSA.

¹⁸ The Deputy Under Secretary of Defense for Logistics replaced the Assistant Secretary of Defense (Installations and Logistics) who was originally referenced at this location.

AP7.4. SPECIFIC AGREEMENT PROVISIONS

AP7.4.1. As a general concept, GSA will be responsible for the management of all items in the FSCs assigned (Attachment 1) for all federal agencies and DoD (except for those retained by the military services under approved item management coding criteria). Conversely, DLA will be responsible for the management of all items in FSCs assigned (Attachment 2) for all DoD activities and federal agencies (except for those retained for military or civil agency management). Recognizing, however, that it is generally impractical to make exclusive FSC assignments, there will continue to exist the necessity for item management exceptions. These should be held to a minimum, however, and such exceptions, to be agreed to jointly by GSA and DLA, will be officially recorded and an exception listing will be published annually for the information of all customers. In this manner, individual item management duplication will be eliminated in the National Supply System.

AP7.4.2. GSA will provide catalog and management data to DoD cataloging activities for items assigned hereunder for DoD support, and for civil agencies, will continue to publish, distribute and maintain a catalog of items managed by GSA for civil agency support. DLA will publish, distribute and maintain a catalog of items assigned hereunder tailored to civil agencies requirements.

AP7.4.3. Civil agencies will not be required to register as users in the Federal Catalog System to obtain support. Such registration will be accomplished as appropriate by GSA or DLA.

AP7.4.4. DoD and GSA will drop inactive items from support of civil agencies on the basis of recorded demand after notification of intent to civil agencies containing a proposed effective date allowing for reclama.

AP7.4.5. Accessorial or other surcharges will be levied by DLA and GSA in a uniform manner for all customers.

AP7.4.6. GSA and DoD will continue to develop and operate compatible systems and supply and financial procedures, affecting agencies they serve, fitted together as a coordinated supply system by which responsive and economical supply support is provided to military and civilian requisitioners.

¹⁹ UMMIPS has adopted time definite delivery standards in Appendix 8 as its time standards.

AP7.4.7. In recognition of a National Materiel Movement and Issue Priority System and in coordination with GSA and the civil agencies affected, DoD will provide in the Defense Uniform Materiel Movement and Issue Priority System (UMMIPS) for assignment of appropriate priority designations for the programs of the civil agencies. Both GSA and DLA will honor UMMIPS time standards in filling requisitions of all customers.¹⁹ GSA also will participate in the military standard logistics data systems as may be appropriate and as subsequently agreed to by separate arrangements.

AP7.4.8. Federal Supply Service (FSS), GSA shall be responsible for monitoring civil agency supply relationships with DLA. DLA shall be responsible for monitoring Defense Component supply relationships with GSA.

AP7.4.9. GSA and DLA will develop and maintain Federal Supply Schedule type contracts for Groups, Commodities or items assigned under terms of this Agreement.

AP7.4.10. This Agreement shall be published in the DoD Directives System and the GSA Federal Property Management Regulations.

AP7.A1. ATTACHMENT 1 TO APPENDIX 7GENERAL SERVICES ADMINISTRATION FEDERAL SUPPLY CLASSESFSC CLASS COMMODITY

3540	Wrapping and Packaging Machinery
3550	Vending and Coin Operated Machines
3590	Miscellaneous Service and Trade Equipment
3750	Gardening Implements and Tools
5110	Hand Tools, Edged, Nonpowered
5120	Hand Tools, Nonedged, Nonpowered
5130	Hand Tools, Power Driven
5133	Drill Bits, Counterbores, and Countersinks: Hand and Machine
5136	Taps, Dies, and Collets; Hand and Machine
5140	Tool and Hardware Boxes
5180	Sets, Kits, and Outfits of Hand Tools
5210	Measuring Tools, Craftsmen's
5345	Disks and Stones, Abrasive
5350	Abrasive Materials
5610	Mineral Construction Materials, Bulk
5620	Building Glass, Tile, Brick, and Block
5630	Pipe and Conduit, Nonmetallic
5640	Wallboard, Building Paper, and Thermal Insulation Materials
5650	Roofing and Siding Materials
5670	Architectural and Related Metal Products
5680	Miscellaneous Construction Materials
7105	Household Furniture
7110	Office Furniture
7125	Cabinets, Lockers, Bins, and Shelving
7195	Miscellaneous Furniture and Fixtures
7220	Floor Coverings
7230	Draperies, Awnings, and Shades
7240	Household and Commercial Utility Containers
7290	Miscellaneous Household and Commercial Furnishings and Appliances
7330	Kitchen Hand Tools and Utensils
7340	Cutlery and Flatware
7350	Tableware
7420	Accounting and Calculating Machines

<u>FSC CLASS</u>	<u>COMMODITY</u>
7430	Typewriters and Office Type Composing Machines
7460	Visible Record Equipment
7490	Miscellaneous Office Machines
7510	Office Supplies
7520	Office Devices and Accessories
7530	Stationery and Record Forms
7710	Musical Instruments
7720	Musical Instrument Parts and Accessories
7730	Phonographs, Radios, and Television Sets: Home Type
7740	Phonograph Records
7810	Athletic and Sporting Equipment
7820	Games, Toys, and Wheeled Goods
7830	Recreational and Gymnastic Equipment
7910	Floor Polishers and Vacuum Cleaning Equipment
7920	Brooms, Brushes, Mops, and Sponges
7930	Cleaning and Polishing Compounds and Preparations
8010	Paints, Dopes, Varnishes, and Related Products
8020	Paint and Artists' Brushes
8030	Preservative and Sealing Compounds
8040	Adhesives
8105	Bags and Sacks
8115	Boxes, Cartons, and Crates
8135	Packaging and Packing Bulk Materials
8510	Perfumes, Toilet Preparations, and Powders
8520	Toilet Soap, Shaving Preparations, and Dentifrices
8530	Personal Toiletry Articles
8540	Toiletry Paper Products
8710	Forage and Feed
8720	Fertilizers
8730	Seeds and Nursery Stock
9310	Paper and Paperboard
9905	Signs, Advertising Displays, and Identification Plates
9910	Jewelry
9915	Collectors' Items
9920	Smokers' Articles and Matches

AP7.A2. ATTACHMENT 2 TO APPENDIX 7DEFENSE LOGISTICS AGENCY FEDERAL SUPPLY CLASSESFSC CLASS COMMODITY

2230	Right-of-way Construction and Maintenance Equipment, Railroad
2410	Tractor, Full Track, Low Speed Tractors, Wheeled
2510	Vehicular Cab, Body, and Frame Structural Components
2520	Vehicular Power Transmission Components Vehicular Brake, Steering, Axle, Wheel, and Track Components
2540	Vehicular Furniture and Accessories
2590	Miscellaneous Vehicular Components
2805	Gasoline Reciprocating Engines, Except Aircraft; and Components
2815	Diesel Engines and Components
2895	Engine Fuel System Components, Nonaircraft
2920	Engine Electrical System Components, Nonaircraft
2930	Engine Cooling System Components, Nonaircraft
2940	Engine Air and Oil Filters, Strainers, and Cleaners Nonaircraft
2990	Miscellaneous Engine Accessories, Nonaircraft
3020	Gears, Pulleys, Sprockets, and Transmission Chain
3030	Belting, Drive Belts, Fan Belts, and Accessories
3040	Miscellaneous Power Transmission Equipment
3110	Bearings, Antifriction, Unmounted
3120	Bearings, Plain, Unmounted
3130	Bearings, Mounted
3210	Sawmill and Planning Mill Machinery
3220	Woodworking Machines
3230	Tools and Attachments for Woodworking Machinery
3431	Electric Arc Welding Equipment
3510	Laundry and Dry Cleaning Equipment
3520	Shoe Repairing Equipment
3530	Industrial Sewing Machines and Mobile Textile Repair Shops
3610	Printing, Duplicating, and Bookbinding Equipment
3655	Gas Generating and Dispensing Systems, Fixed or Mobile
3695	Miscellaneous Special Industry Machinery
3710	Soil Preparation Equipment
3720	Pest, Disease, and Frost Control Equipment
3770	Saddlery, Harness, Whips, and Related Animal Furnishings
3805	Earth Moving and Excavating Equipment
3810	Cranes and Crane-Shovels

FSC CLASS COMMODITY

3815	Crane and Crane-Shovel Attachments
3820	Mining, Rock Drilling, Earth Boring, and Related Equipment
3825	Road Clearing Equipment
3830	Truck and Tractor Attachments
3835	Petroleum Production and Distribution Equipment
3895	Miscellaneous Construction Equipment
3910	Conveyors
3920	Materials Handling Equipment, Nonself-propelled
3930	Warehouse Trucks and Tractors, Self-propelled
3940	Blocks, Tackle, Rigging, and Slings
3950	Winches, Hoists, Cranes, and Derricks
3990	Miscellaneous Materials Handling Equipment
4010	Chain and Wire Rope
4020	Fiber Rope, Cordage, and Twine
4030	Fittings for Rope, Cable, and Chain
4110	Refrigeration Equipment
4120	Air Conditioning Equipment
4130	Refrigeration and Air Conditioning Components
4140	Fans, Air Circulators, and Blower Equipment
4210	Fire Fighting Equipment
4220	Marine Lifesaving and Diving Equipment
4310	Compressors and Vacuum Pumps
4320	Power and Hand Pumps
4330	Centrifugals, Separators, and Pressure and Vacuum Filters
4440	Driers, Dehydrators, and Anhydrators
4460	Air Purification Equipment
4510	Plumbing Fixtures and Accessories
4520	Space Heating Equipment and Domestic Water Heaters
4530	Fuel Burning Equipment Units
4540	Miscellaneous Plumbing, Heating, and Sanitation Equipment
4610	Water Purification Equipment
4620	Water Distillation Equipment, Marine and Industrial Treatment Equipment
4630	Sewage Treatment Equipment
4710	Pipe and Tube
4720	Hose and Tubing, Flexible
4730	Fittings and Specialties: Hose, Pipe, and Tube
4810	Valves, Powered
4820	Valves, Nonpowered
4930	Lubrication and Fuel Dispensing Equipment
5305	Screws

<u>FSC CLASS</u>	<u>COMMODITY</u>
5306	Bolts
5307	Studs
5310	Nuts and Washers
5315	Nails, Keys, and Pins
5320	Rivets
5325	Fastening Devices
5330	Packing and Gasket Materials
5335	Metal Screening
5340	Miscellaneous Hardware
5355	Knobs and Pointers
5360	Coil, Flat, and Wire Springs
5365	Rings, Shims, and Spacers
5410	Prefabricated and Portable Buildings
5420	Bridges, Fixed And Floating
5430	Storage Tanks
5440	Scaffolding Equipment and Concrete Forms
5450	Miscellaneous Prefabricated Structures
5510	Lumber and Related Basic Wood Materials
5520	Millwork
5530	Plywood and Veneer
5660	Fencing, Fences, and Gates
5905	Resistors
5910	Capacitors
5915	Filters and Networks
5920	Fuses and Lightning Arresters
5925	Circuit Breakers
5930	Switches
5935	Connectors, Electrical
5940	Lugs, Terminals, and Terminal Strips
5945	Relays, Contractors, and Solenoids
5950	Coils and Transformers
5955	Piezoelectric Crystals
5960	Electron Tubes and Associated Hardware
5961	Semiconductor Devices and Associated Hardware
5962	Microelectronic Circuit Devices
5965	Headsets, Handsets, Microphones and Speakers
5970	Electrical Insulators and Insulating Materials
5975	Electrical Hardware and Supplies
5977	Electrical Contact Brushes and Electrodes
5985	Antennas, Waveguides, and Related Equipment

FSC CLASS COMMODITY

5990	Synchros and Resolvers
5995	Cable, Cord, and Wire Assemblies: Communication Equipment
5999	Miscellaneous Electrical and Electronic Components
6105	Motor, Electrical
6110	Electrical Control Equipment
6115	Generators and Generator Sets, Electrical
6120	Transformers: Distribution and Power Station
6145	Wire and Cable, Electrical
6150	Miscellaneous Electric Power and Distribution Equipment
6210	Indoor and Outdoor Electric Lighting Fixtures
6220	Electric Vehicular Lights and Fixtures
6230	Electric Portable and Hand Lighting Equipment
6240	Electric Lamps
6250	Ballistics, Lampholders, and Starters
6260	Nonelectrical Lighting Fixtures
6350	Miscellaneous Alarm and Signal Systems
6505	Drugs, Biologicals, and Official Reagents
6508	Medicated Cosmetics and Toiletries
6510	Surgical Dressing Materials
6515	Medical and Surgical Instruments, Equipment, and Supplies
6520	Dental Instruments, Equipment, and Supplies
6525	X-Ray Equipment and Supplies: Medical, Dental Veterinary
6530	Hospital Furniture, Equipment, Utensils, and Supplies
6532	Hospital and Surgical Clothing and Related Special Purpose Items
6540	Opticians Instruments, Equipment, and Supplies
6545	Medical Sets, Kits, and Outfits
6630	Chemical Analysis Instruments
6635	Physical Properties Testing Equipment
6640	Laboratory Equipment and Supplies
6655	Geophysical and Astronomical Instruments
6670	Scales and Balances
6675	Drafting, Surveying, and Mapping Instruments
6680	Liquid and Gas Flow, Liquid Level, and Mechanical Motion Measuring Instruments
6750	Photographic Supplies
6810	Chemicals
6820	Dyes
6830	Gases: Compressed and Liquefied
6840	Pest Control Agents and Disinfectants

FSC CLASS COMMODITY

6850	Miscellaneous Chemical Specialties
7210	Household Furnishings
7310	Food Cooking, Baking, and Serving Equipment
7320	Kitchen Equipment and Appliances
7360	Sets, Kits, and Outfits: Food Preparation and Serving
7610	Books and Pamphlets
7660	Sheet and Book Music
7690	Miscellaneous Printed Matter
8110	Drums and Cans
8120	Commercial and Industrial Gas Cylinders
8125	Bottles and Jars
8305	Textile Fabrics
8310	Yarn and Thread
8315	Notions and Apparel Findings
8320	Padding and Stuffing Materials
8325	Fur Materials
8330	Leather
8335	Shoe Findings and Soling Materials
8340	Tents and Tarpaulins
8345	Flags and Pennants
8405	Outerwear, Men's
8410	Outerwear, Women's
8415	Clothing, Special Purpose
8420	Underwear and Nightwear, Men's
8425	Underwear and Nightwear, Women's
8430	Footwear, Men's
8435	Footwear, Women's
8440	Hosiery, Handwear, and Clothing Accessories, Men's
8445	Hosiery, Handwear, and Clothing Accessories, Women's
8450	Children's and Infants Apparel and Accessories
8455	Badges and Insignia
8460	Luggage
8465	Individual Equipment
8470	Armor, Personal
8905	Meat, Poultry, and Fish
8910	Dairy Foods and Eggs
8915	Fruits and Vegetables
8920	Bakery and Cereal Products

FSC CLASS COMMODITY

8925	Sugar, Confectionery, and Nuts
8930	Jams, Jellies, and Preserves
8935	Soups and Bouillons
8940	Special Dietary Foods and Food Specialty Preparations
8945	Food Oils and Fats
8950	Condiments and Related Products
8955	Coffee, Tea, and Cocoa
8960	Beverages, Nonalcoholic
8970	Composite Food Packages
8975	Tobacco Products
9110	Fuels, Solid
9150	Oils and Greases: Cutting
9160	Miscellaneous Waxes, Oils, and Fats
9320	Rubber Fabricated Materials
9330	Plastics Fabricated Materials
9340	Glass Fabricated Materials
9350	Refractories and Fire Surfacing Materials Lubricating, and Hydraulic
9390	Miscellaneous Fabricated Nonmetallic Materials
9505	Wire, Nonelectrical, Iron and Steel
9510	Bars and Rods, Iron and Steel
9515	Plate, Sheet, and Strip: Iron and Steel
9520	Structural Shapes, Iron and Steel
9525	Wire, Nonelectrical, Nonferrous Base Metal
9530	Bars and Rods, Nonferrous Base Metal
9535	Plate, Sheet, Strip, Foil: Nonferrous Base Metal
9540	Structural Shapes, Nonferrous Base Metal
9545	Plate, Sheet, Strip, Foil, and Wires Precious Metal
9925	Ecclesiastical Equipment, Furnishings, and Supplies
9930	Memorials; Cemeterial and Mortuary Equipment and Supplies
9999	Miscellaneous Items

AP8. APPENDIX 8

TIME-DEFINITE DELIVERY STANDARDS

AP8.1. GENERAL

AP8.1.1. The Time-Definite Delivery (TDD) standards presented in this Appendix constitute the maximum amount of time that should elapse during any given pipeline segment for items that are in stock or for items that are processed as part of planned direct-vendor deliveries. They represent 85 percent of the aggregate times that the wholesale supply system is capable of delivering required materiel to its customers.

AP8.1.1.1. The DoD Components may adopt more stringent time standards for pipeline segments they control and should ensure that their customer wait time and logistics response time goals consider TDD standards. The DoD Components shall submit changes to the standards in this Appendix to the DUSD(L&MR).

AP8.1.1.2. During demand and supply planning, the materiel managers should develop, with distribution and transportation managers, TDD standards tailored to meet specific performance requirements of the customer, as documented in a performance-based agreement. Accordingly, the TDD standards in this Appendix are provided as starting points for performance-based agreement negotiations and shall only be used in the absence of specific TDD agreements with customers.

AP8.1.2. Three distinct categories of TDD standards are provided, which correspond to the three processing responses that customers may request from the wholesale supply system on their requisitions.

AP8.1.3. The standards are given in calendar days with .5 meaning one-half day.

AP8.1.4. The standards are listed by pipeline segment and geographic area (of the activity originating the order) for a designated transportation priority. Any activity outside the Continental United States (CONUS) is in an overseas area.

AP8.1.4.1. A container consolidation point (CCP) either consolidates shipments on an air pallet or containerizes shipments in a SEAVAN for transportation to overseas areas.

AP8.1.4.2. The time standard for storage site to CCP (i.e., segment D) only applies to a shipment whose final destination is outside of the CONUS (OCONUS). It is the elapsed time from release of the shipment by the storage activity to arrival at one of the two designated CONUS CCPs.

AP8.1.4.3. The time standard for CONUS intransit time (i.e., segment F) is one of the following:

AP8.1.4.3.1. For a CONUS shipment, the time from release of the shipment by the storage site (or military base) to the carrier until receipt by a CONUS consignee.

AP8.1.4.3.2. For an OCONUS shipment that is processed by one of the two designated CONUS CCPs, the elapsed time from release by the CCP to receipt by the POE.

AP8.1.4.3.3. For an OCONUS shipment that is not processed by one of the two designated CONUS CCPs, elapsed time from release by the storage activity to receipt by the POE.

AP8.1.4.4. The time standard for POE (i.e., segment G) includes port hold time to account for time cargo awaits lift.

AP8.2. AREAS

Areas are defined as CONUS, airlift and/or sealift areas (Areas A through D), and express service (listed as EXP).

AP8.2.1. Airlift areas are, as follows:

AP8.2.1.1. Area A. To locations in the vicinity of Alaska (Elmendorf AFB); Hawaii (Hickam AFB); North Atlantic (Thule AB, Greenland, and NAVSTA Keflavik, Iceland); Caribbean (NAS Guantanamo Bay, Cuba, and NAVSTA Roosevelt Roads, and Puerto Rico).

AP8.2.1.2. Area B. To locations in the vicinity of United Kingdom (RAF Mildenhall, England) and Northern Europe (Ramstein AB, Germany, and Lajes AB, Portugal (Azores)).

AP8.2.1.3. Area C. To locations in the vicinity of Japan (Yokota AB and Kadena AB (Okinawa)); Korea (Osan AB); Guam (Andersen AFB); and Western Mediterranean (Spain (NAVSTA Rota), Italy (Aviano AB, NAS Sigonella, Olbia, and Naples)).

AP8.2.1.4. Area D. Hard lift areas -- all other destinations not listed as determined by the U.S. Transportation Command; e.g., low-use Alaska (Eielson AFB, Adak, Eareckson AS, and Galena); low-use Japan (Itazuke, MCAS Iwakuni, Misawa AB); low-use Korea (Kunsan AB and Kimhae); Indian Ocean (Diego Garcia); New Zealand (Christchurch); Singapore (Paya Lebar); Greece (Souda Bay); Turkey (Incirlik AB); Southwest Asia (Saudi Arabia (Dharan and Riyadh), Kuwait, Bahrain, Oman (Fujairah)); and Israel (Tel Aviv). The time standards for port of debarkation (POD) for Area D are lower than the other areas.

AP8.2.1.5. EXP. Commercial door-to-door air service is only for OCONUS shipments that are transportation priority 1 or 2. It is an alternative service to be used when established Air Mobility Command channel service is not adequate. The intransit-to-theater standard for commercial door-to-door air service (i.e., segment H) encompasses the total time for contract transportation rather than individual nodes.

AP8.2.1.5.1. A required delivery date (RDD) equal to "999" indicates an expedited handling requirement for Non-Mission-Capable-Supply (NMCS) overseas customers or CONUS customers deploying within 30 days. This RDD applies to requisitions with priority designators 01 through 03 and is reserved for U.S. Forces.

AP8.2.1.5.2. Subparagraphs AP8.4.1.3., AP8.4.1.4., and AP8.4.1.5., below, describe the assignment of an RDD of 777, N__, or E__, respectively. These RDDs apply to requisitions with priority designators 01 through 08.

AP8.2.1.6. Deployed Navy afloat units shall be measured against time standards in areas A through D based on their current area of operation. Afloat units operating from CONUS ports shall be measured against time standards in area A.

AP8.2.2. Sealift areas are, as follows:

AP8.2.2.1. Area A. Alaska (Anchorage, Fairbanks), Hawaii, Puerto Rico, and NAVSTA Guantanamo Bay, Cuba.

AP8.2.2.2. Area B. United Kingdom, Belgium, the Netherlands, Luxembourg, Germany, Central America, Johnston Island, Spain, Italy, Greece, Turkey, Israel, Egypt, Iceland, and the Azores.

AP8.2.2.3. Area C. Japan (including Okinawa), Korea, Guam, and Kwajalein Island.

AP8.2.2.4. Area D. Australia, New Zealand, Southwest Asia, Seychelles, China, the Philippines, India, Pakistan, Diego Garcia, Thailand, Malaysia, Singapore, Saipan, East Africa, and West Africa.

AP8.2.2.5. Hard Lift Areas. For areas not in subparagraphs AP8.2.2.1. through AP8.2.2.4., above, Sealift Area D maximum segment times should be used. Greenland, Ascension Island, and West Alaska have either no scheduled service from CONUS, infrequent service, or seasonal service.

AP8.3. TDD STANDARDS FOR CATEGORY 1 REQUISITIONS

AP8.3.1. Category 1 applies to requisitions with priority designators 01 through 03 and with or without RDDs, except when the RDD starts with an "X" or an "S". A starting "X" or "S" in the RDD indicates that the materiel is required a number of months in the future.

AP8.3.2. The time standards in Table AP8.T1. apply for category 1:

Table AP8.T1. Time-Definite Delivery Standards for Category 1 Requisitions

		AREA				
PIPELINE SEGMENT	CONUS	A	B	C	D	EXP
A. Requisition Submission Time	.5	.5	.5	.5	.5	.5
B. ICP Processing Time	.5	.5	.5	.5	.5	.5
C. Storage Site (or Base) Processing, Packaging and Transportation Hold Time	1	1	1	1	1	1
D. Storage Site to CCP Transportation Time	N/A	1	1	1	1	N/A
E. CCP Processing Time	N/A	.5	.5	.5	1	N/A
F. CONUS In-Transit Time	1.5	1	1	1	1	N/A
G. POE Processing and Hold Time	N/A	3	3	3	3	N/A
H. In-transit to Theater Time	N/A	1	1	1	2.5	3
I. POD Processing Time	N/A	2	2	2	2	N/A
J. In-Transit, Within-Theater time	N/A	1	1	1	1	1
K. Receipt Take-Up Time	.5	.5	.5	.5	.5	.5
Total Order-to-Receipt Time	4	12	12	12	14	6.5

AP8.4. TIME STANDARDS FOR CATEGORY 2 REQUISITIONS

AP8.4.1. Category 2 applies to requisitions with priority designators 04 through 15 and the following RDDs:

AP8.4.1.1. 444. An RDD equal to "444" indicates handling service for customers collocated with the storage activity or for locally negotiated arrangements.

AP8.4.1.2. 555. An RDD equal to "555" indicates exception to mass requisition cancellation, expedited handling required.

AP8.4.1.3. 777. An RDD equal to "777" indicates expedited handling required for reasons other than indicated for 444 or 555.

AP8.4.1.4. N. An RDD equal to "N__" (where "_" is any alphanumeric character or blank) indicates expedited handling due to NMCS requirement CONUS customer.

AP8.4.1.5. E. An RDD equal to "N__" (where "_" is any alphanumeric character or blank) indicates expedited handling due to anticipated NMCS requirement CONUS customer.

AP8.4.1.6. Specific Julian Date Less Than 8 Days For CONUS Customers or 21 Days For OCONUS Customers. An RDD equal to a Julian date that is less than or equal to 8 or 21 days (depending on if the customer is CONUS or OCONUS, respectively) of the Julian date the requisition or associated shipment is being processed indicates handling to meet that date of delivery.

AP8.4.2. The time standards in Table AP8.T2. apply for category 2:

Table AP8.T2. Time-Definite Delivery Standards for Category 2 Requisitions

		AREA				
PIPELINE SEGMENT	CONUS	A	B	C	D	EXP
A. Requisition Submission Time	.5	.5	.5	.5	.5	.5
B. ICP Processing Time	.5	.5	.5	.5	.5	.5
C. Storage Site (or Base) Processing, Packaging and Transportation Hold Time	1	1	1	1	1	1
D. Storage Site to CCP Transportation Time	N/A	3	3	3	3	N/A
E. CCP Processing Time	N/A	1	1	1	1	N/A
F. CONUS In-Transit Time	4	2.5	2.5	2.5	2.5	N/A
G. POE Processing and Hold Time	N/A	3.5	3.5	3.5	4	N/A
H. In-transit to Theater Time	N/A	1	1	1	2.5	3
I. POD Processing Time	N/A	2	2	2	2	N/A
J. In-Transit, Within-Theater time	N/A	1	1	1	1	1
K. Receipt Take-Up Time	1	1	1	1	1	.5
Total Order-to-Receipt Time	7	17	17	17	19	6.5

AP8.5. TIME STANDARDS FOR CATEGORY 3 REQUISITIONS

AP8.5.1. Category 3 applies to requisitions with priority designators and RDDS indicating routine handling. Those priority designators are 04 through 15, and those RDDs are Julian dates that are blank or greater than 8 or 21 days (depending on if the customer is CONUS or OCONUS, respectively) from Julian dates when the requisition and associated shipment(s) are being processed.

AP8.5.2. The time standards in Table AP8.T3. apply for category 3:

Table AP8.T3. Time-Definite Delivery Standards for Category 3 Requisitions

			AREA		
PIPELINE SEGMENT	CONUS	A	B	C	D
A. Requisition Submission Time	1	1	1	1	1
B. ICP Processing Time	1	1	1	1	1
C. Storage Site (or Base) Processing, Packaging and Transportation Hold Time	3	3	3	3	3
D. Storage Site to CCP Transportation Time	N/A	6	6	6	6
E. CCP Processing Time	N/A	4	4	4	10
F. CONUS In-Transit Time	7	5	5	5	5
G. POE Processing and Hold Time	N/A	5	5	5	10
H. In-transit to Theater Time	N/A	4	9	18	27
I. POD Processing Time	N/A	3	3	3	3
J. In-Transit, Within-Theater time	N/A	3	3	3	3
K. Receipt Take-Up Time	2	2	2	2	2
Total Order-to-Receipt Time	14	37	42	51	71

AP9. APPENDIX 9

UMMIPS RESPONSIBILITIES

AP9.1.1. The DUSD(L&MR) shall:

AP9.1.1.1. Monitor implementation of UMMIPS and compliance with established system requirements.

AP9.1.1.2. Resolve all requests for deviation or exemption from UMMIPS submitted by the DoD Components and the other Federal Agencies.

AP9.1.1.3. Establish criteria for allocating critical materiel in the DoD distribution system to resolve competing requirements among the DoD Components, non-DoD Federal Agencies, foreign governments, and/or foreign agencies.

AP9.1.1.4. Issue criteria, with the Chairman of the Joint Chiefs of Staff. When temporary imperative situations require deviations from those criteria, issue supplemental UMMIPS provisions to ensure delivery of selected items that are urgently needed for a mission or operation, or for a program vital to the Department of Defense or U.S. objectives.

AP9.1.1.5. Charter periodic reviews, at least annually, of UMMIPS operations to ensure consistent interpretation and uniform application of the system at all echelons, to analyze the validity of established time standards, and to improve and simplify the UMMIPS.

AP9.1.1.6. Coordinate policy guidance, instructional memoranda, and system requirements within the OSD, as applicable.

AP9.1.2. The Chairman of the Joint Chiefs of Staff shall:

AP9.1.2.1. Establish mechanisms to supervise overall implementation of Secretary of Defense guidance on the assignment of UMMIPS Force or Activity Designators (F/ADs) to U.S. and foreign country units and activities. That responsibility includes the following:

AP9.1.2.1.1. Recommending F/AD I for forces, activities, units, programs, or projects to the Secretary of Defense for approval.

AP9.1.2.1.2. Assigning F/ADs II through V to U.S. and foreign country units or activities and to programs and projects based on the guidance in the following paragraphs.

AP9.1.2.1.3. Assigning F/ADs as follows, according to DoD importance or mission essentiality:

AP9.1.2.1.3.1. F/AD I assignments are reserved for those forces, units, programs, projects, or activities that are most important militarily in the opinion of the Chairman of the Joint Chiefs of Staff and that are approved by the Secretary of Defense to preserve the unique impact of F/AD I requisitions on the supply system.

AP9.1.2.1.3.2. The lowest F/AD required to indicate relative importance of the force, activity, unit, program, or project shall be assigned.

AP9.1.2.1.3.3. The assignment of lower F/ADs for segments of organizations, phases, projects, or programs, or for individual situations shall be made, where possible.

AP9.1.2.1.3.4. Designator I shall be assigned to the following:

AP9.1.2.1.3.4.1. Programs that have been approved for a DX industrial priority rating by the Secretary of Defense according to DoD Directive 4400.1 (reference (bs)). The automatic F/AD ranking shall continue after a given program enters operational use as long as that program continues to be authorized a DX rating. When a program no longer is authorized such a rating, the use of F/AD I may continue, if considered necessary, for 90 days to allow for the processing of a request for F/AD I approval, according to subparagraph AP9.1.2.1.3.4.2., below. Continuance of the F/AD I does not permit continued use of the DX industrial priority rating since termination of that rating is effective immediately.

AP9.1.2.1.3.4.2. Units, projects, forces, activities, or programs, including foreign country units or activities that have been specifically approved by the Secretary of Defense on the recommendation of the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.5. Designator II shall be assigned to the following:

AP9.1.2.1.3.5.1. Units (combat, combat support, or combat service support) engaged in or assigned to combat zone operations, as specified by the

Chairman of the Joint Chiefs of Staff or the supported Combatant Commander and approved by the Secretary of Defense.

AP9.1.2.1.3.5.2. Units engaged in military operations, as designated by the Chairman of the Joint Chiefs of Staff through the Joint Strategic Capabilities Plan (JSCP) and/or deliberate plans in the Joint Operation, Planning and Execution System (JOPEs). Designation shall specify the period for which the authorization is effective.

AP9.1.2.1.3.5.3. Units (combat, combat support, or combat service support) designated to deploy in support of national security objectives within C+30 days when directed by the National Command Authority (NCA).

AP9.1.2.1.3.5.4. Specified units or activities of allied nations meeting the requirements in subparagraphs AP9.1.2.1.3.5.1. through AP9.1.2.1.3.5.3., above, as requested by the respective Commanders of the Combatant Commands, and as approved by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.5.5. Units or activities supporting allied nations meeting the requirements in subparagraphs AP9.1.2.1.3.5.1. through AP9.1.2.1.3.5.3., above, as requested by the respective Commanders of the Combatant Commands, and as designated by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.5.6. National Mission Forces, as defined in Chairman of the Joint Chiefs of Staff Instruction 5113.01B (reference (bt)), which are not designated F/AD I by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.5.7. Units directed by the Chiefs of the Military Services or the Commander, U.S. Special Operations Command (USSOCOM); ordered by the Chairman of the Joint Chiefs of Staff; and designated through the crisis action planning process, to deploy in support of military operations. Units shall possess a valid deployment or execute order.

AP9.1.2.1.3.5.8. Units, or components thereof, designated by the Chiefs of the Military Services/Commanders of affected Combatant Commands, as forward-based units intended to react rapidly to proximate threats in support of military operations in overseas theaters.

AP9.1.2.1.3.5.9. Single Integrated Operational Plan (SIOP) specifically tasked units, not designated F/AD I.

AP9.1.2.1.3.5.10. Industrial maintenance and repair activities providing direct repair and return for F/AD I and II non-mission capable requirements. Direct repair and return is defined as those cases in which an unserviceable asset is removed from a F/AD I or F/AD II unit's non-mission capable equipment, and the only source to fill that requirement is immediate repair and return of that asset. Upon return, that same asset is installed in the combat unit's equipment, making it mission capable. The foregoing authorization does not include repair and return to stock for the F/AD I and F/AD II units.

AP9.1.2.1.3.5.11. Federal Agency units and programs vital to DoD or National Security objectives, as determined by the Service Chiefs/Commander, USSOCOM/Commanders of affected Combatant Commands.

AP9.1.2.1.3.5.12. Military programs vital to DoD or National Security objectives, as determined by the Military Service Chiefs/Commander, USSOCOM/Commanders of affected Combatant Commands in affected Combatant Command areas of responsibility.

AP9.1.2.1.3.5.13. Critical logistical, mobilization support, and medical units, as designated by the Chiefs of the Military Services/ Commander, USSOCOM /Commanders of supported or supporting Combatant Commands, required to provide immediate support to units deploying to conduct military operations, for those units annotated in subparagraphs AP9.1.2.1.3.5.1. through AP9.1.2.1.3.5.3., above.

AP9.1.2.1.3.5.14. Critical non-deploying units, activities, and organizations (e.g., port opening or closing authorities, air passenger and cargo terminal operations, and general logistics arms such as ICPs), as determined by the Service Chiefs/Commander, USSOCOM/Commanders of supported or supporting Combatant Commands.

AP9.1.2.1.3.6. Designator III shall be assigned to the following:

AP9.1.2.1.3.6.1. Units (combat, combat support, or combat service support), designated to deploy in support of national security objectives when directed by the NCA from C+31 to C+90.

AP9.1.2.1.3.6.2. Units (combat, combat support, or combat service support), designated by the Chiefs of the Military Services and/or the Commander, USSOCOM, or Commanders of supporting Combatant Commands, to prepare for deployment (i.e., in possession of a valid warning, an alert, or a prepare-to-deploy order), in support of military operations, as specified by a supported

Combatant Commander or by the Chairman of the Joint Chiefs of Staff through the JOPES, or as required by the crisis action planning process. Designation shall specify the period for which the authorization is effective.

AP9.1.2.1.3.6.3. Specified units or activities of allied nations meeting the requirements in subparagraphs AP9.1.2.1.3.6.1. and/or AP9.1.2.1.3.6.2., above, as designated by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.6.4. Units or activities supporting units of allied nations meeting the requirements of subparagraphs AP9.1.2.1.3.6.1. and/or AP9.1.2.1.3.6.2., above, as designated by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.6.5. Combat training units, to include combat or combat service support schools, supporting combat, combat support, or combat service support units designated to deploy in support of National Security objectives, as designated by the Military Services, the Commander, USSOCOM, or the Commander of an affected Combatant Command. These units provide systemic instruction to individuals in subjects (air, land, or sea) that enhance their knowledge and skills of the art of war and directly support F/AD I and II operational requirements (e.g., air crews to support SIOP units and Combat Training Centers).

AP9.1.2.1.3.6.6. Pre-positioned War Reserve Materiel starter/swing stocks, as designated by the Services and approved by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.6.7. Industrial maintenance and repair activities (including base-level organic repair functions) providing direct logistics support for F/AD III units and direct logistic support other than direct repair and return for F/AD I and II units. Overseas industrial activities shall use the F/AD specified in the applicable contract.

AP9.1.2.1.3.6.8. Federal Agency units and programs vital to DoD or National Security objectives, as determined by the Military Service Chiefs/Commander, USSOCOM/Commanders of affected Combatant Commands.

AP9.1.2.1.3.6.9. U.S. Military Programs vital to DoD or National Security objectives, as determined by the Military Service Chiefs/Commander, USSOCOM /Commanders of affected Combatant Commands.

AP9.1.2.1.3.6.10. Critical logistical, mobilization support, and medical units, as designated by the Chiefs of the Military Services/Commander, USSOCOM/ Commanders of affected Combatant Commands, required to provide

immediate support to units deploying to conduct military operations, for those units in subparagraphs AP9.1.2.1.3.6.1. and/or AP9.1.2.1.3.6.2. above.

AP9.1.2.1.3.7. Designator IV shall be assigned to the following:

AP9.1.2.1.3.7.1. Units (combat, combat support, or combat service support) designated to deploy in support of national security objectives greater than C+91 days, when directed by the NCA.

AP9.1.2.1.3.7.2. Units (combat, combat support, or combat service support), designated by the Service Chiefs to deploy in support of military operations, as specified by the Commander-in-Chief or by the Chairman of the Joint Chiefs of Staff through the JOPES or as required by the crisis action planning process. Designation shall specify the period for which the authorization is effective.

AP9.1.2.1.3.7.3. Specified units or activities of allied nations meeting the requirements in subparagraphs AP9.1.2.1.3.7.1. and/or AP9.1.2.1.3.7.2., above, as recommended by the Commander of a Combatant Command and approved by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.7.4. Units or activities supporting activities of allied nations meeting the requirements in subparagraphs AP9.1.2.1.3.7.1. and/or AP9.1.2.1.3.7.2., above, as recommended by the Commander of a Combatant Command and approved by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.3.7.5. Combat training units supporting combat, combat support, or combat service support units as defined in subparagraphs AP9.1.2.1.3.7.1. and/or AP9.1.2.1.3.7.2., above. These units train the forces to respond to operational requirements deemed necessary by the Services (e.g., Military Occupational Specialty Qualification, individual skills, and technical schools).

AP9.1.2.1.3.7.6. Logistical, mobilization support, and medical units, as designated by the Chiefs of the Military Services/Commander, USSOCOM/Commanders of affected Combatant Commands, required to provide immediate support to units deploying to conduct military operations in support of units in subparagraphs AP9.1.2.1.3.7.1. through AP9.1.2.1.3.7.2., above.

AP9.1.2.1.3.7.7. Federal Agency units and programs designated by the Military Service Chiefs/Commander, USSOCOM/Commanders of affected Combatant Commands.

AP9.1.2.1.3.7.8. Military programs designated by the Military Service Chiefs/Commander, USSOCOM/Commanders of affected Combatant Commands.

AP9.1.2.1.3.8. Designator V shall be assigned to the following:

AP9.1.2.1.3.8.1. All remaining U.S. Forces, units, activities, projects, or programs.

AP9.1.2.1.3.8.2. All other units or activities of allied nations, as designated by the Chairman of the Joint Chiefs of Staff.

AP9.1.2.1.4. Delegating authority to the Heads of the DoD Components and other Federal Agencies, if necessary, to assign F/ADs II through V to their respective forces, activities, units, programs, and projects.

AP9.1.2.2. Coordinate policy and supporting procedures for allocation of defense articles among U.S., allied, and friendly units or activities during periods of military crisis and war.

AP9.1.2.3. Conduct annual audits of each F/AD I assignment to ascertain continued validity for those assignments that previously had been approved by the Secretary of Defense. Participate in reviews, initiated by the Office of the Secretary of Defense, to determine if DoD programs that have been authorized a DX rating should retain that rating. Periodically review F/AD assignments for which the Chairman of the Joint Chiefs of Staff has not delegated the authority to make assignments to the other DoD Components (e.g., F/ADs for joint programs).

AP9.1.2.4. Periodically conduct, or request an impartial activity to conduct, reviews of F/AD II - IV assignments to ensure that F/ADs are assigned equitably, according to criteria contained in governing regulations and instructions.

AP9.1.2.5. Through the Joint Materiel Priorities and Allocations Board, establish, modify, or recommend priorities for allocating materiel assets in the DoD distribution system when the DoD Components cannot resolve competing requirements among themselves.

AP9.1.3. The Defense Security Cooperation Agency (DSCA) shall:

AP9.1.3.1. With the Military Services and the DLA, allocate materiel and establish priorities for distribution of security assistance program materiel in support of foreign military sales during periods of non-crisis and peacetime.

AP9.1.3.2. Not perform the above functions during periods of crisis and war when the Secretary of Defense has delegated that authority to the Chairman of the Joint Chiefs of Staff.

AP9.1.4. The Heads of the DoD Components shall:

AP9.1.4.1. Designate a single office of primary responsibility, and identify that office to the DUSD(L&MR), to act as focal point for UMMIPS matters. The functions of these offices include the following:

AP9.1.4.1.1. Assigning F/ADs II through V to units, activities, programs, and projects of their respective DoD Components, if such authority has been granted by the Chairman of the Joint Chiefs of Staff.

AP9.1.4.1.2. Keeping abreast of their respective F/AD assignments.

AP9.1.4.1.3. Monitoring the use of the UMMIPS throughout their respective DoD Components.

AP9.1.4.1.4. Developing and submitting to the DUSD(L&MR) a DoD Component position paper on all system revision proposals.

AP9.1.4.2. Develop and publish implementing regulations that conform to the policies and standards in DoD Directive 5010.38 (reference (z)) and the criteria outlined herein.

AP9.1.4.3. Conduct continuing internal training programs to ensure effective operation and accurate application of the system.

AP9.1.4.4. Conduct command and administrative audits and inspections by reviewing internal operations with the objective of eliminating and preventing abuses, misapplication, and misinterpretation of the UMMIPS.

AP9.1.4.5. Enforce accurate use of the UMMIPS through applicable disciplinary action for the deliberate misuse of the system.

AP9.1.4.6. Conduct annual reviews to validate the propriety of F/ADs assigned to units in their respective DoD Components. Report the results of those reviews to the Office of the DUSD(L&MR) and the Joint Staff, Director for Logistics, no later than June 30 of each year.

AP9.1.4.7. Develop internal performance goals for measuring performance against the established UMMIPS time standards.

AP9.1.4.8. Participate in joint development efforts and periodic evaluations of the UMMIPS.

AP9.1.5. The Commanding Officers or the Heads of Requisitioning Activities shall:

AP9.1.5.1. Ensure that the assignment of priority designators is valid and accurate, and consistent with F/ADs assigned by higher authority, as well as the existing urgency of need. Additionally, they shall ensure that required delivery dates that are assigned to requisitions are valid. Similarly, commanding officers of international logistics control offices that receive requisitions from MAP requisitioners are responsible for review of assigned priority designators and delivery dates.

AP9.1.5.2. Personally review, or delegate in writing to specific personnel the authority to review, all requirements that are assigned an urgency of need designator (UND) A on the basis of an inability to perform a mission. That review shall be done before the transmission of requisitions to the source of supply; and in cases in which the assignment of UND A is sustained, it constitutes a certification that the assignment is correct.

AP9.1.5.3. Delegate in writing to specific personnel the authority to review all requirements based on UND B to certify that the urgency was accurately determined. That review shall be done before the transmission of requisitions to the source of supply.

AP10. APPENDIX 10

CHARTER FOR THE DoD-UNIQUE ITEM TRACKING COMMITTEE (UITC)

AP10.1. PURPOSE

This Charter establishes the DoD UITC to register DoD-level UIT programs for tracking individual assets for selected items used within the Department of Defense, maintain a central repository of all DoD-level UIT programs, identify DoD Component-level programs for inter-DoD Component adoption, and recommend improvements in UIT program concepts and technology.

AP10.2. ORGANIZATION AND MANAGEMENT

AP10.2.1. The Defense Logistics Management Standards Office shall chair the DoD UITC.

AP10.2.2. Each Military Service, Defense Agency, and participating external organizations shall provide a representative to the UITC with the functional and technical expertise needed to execute the UITC responsibilities.

AP10.3. FUNCTIONS

The DoD UITC shall:

AP10.3.1. Coordinate actions essential to the improvement of DoD UIT programs.

AP10.3.2. Review and register proposed DoD-level UIT programs for inter-DoD Component tracking to ensure the programs do not conflict with or duplicate established inter-DoD Component programs.

AP10.3.3. Maintain a record of all approved and disapproved DoD and Component UIT programs to include the reason for disapproval.

AP10.3.4. Provide direction and oversight to the Joint Small Arms Coordinating Group (JSACG) and other commodity or program-oriented groups dedicated to unique item tracking.

AP10.3.5. Review UIT programs and recommend to the DUSD(L&MR) changes to DoD policy and procedures, advancements in technology that shall improve the

effectiveness of UIT programs, and solutions to inter-DoD Component problems identified to the UITC.

AP10.3.6. Develop, recommend, and review enhancements to the Defense Logistics Management System (DLMS), to resolve problems in, or to improve, inter-DoD Component data exchange.

AP10.4. RESPONSIBILITIES

AP10.4.1. The Chair shall:

AP10.4.1.1. Ensure the accomplishment of UITC functions and discharge of responsibilities.

AP10.4.1.2. Convene the UITC as required, but at least annually.

AP10.4.1.3. Submit minutes of each UITC meeting to the DUSD(L&MR).

AP10.4.1.4. Maintain a current list of representatives to the UITC.

AP10.4.1.5. Present new UIT programs to the UITC for registration.

AP10.4.1.6. Maintain a current list of all DoD UIT programs.

AP10.4.1.7. Present problems to the UITC for review and resolution.

AP10.4.1.8. Submit UITC recommendations for program improvement to the DUSD(L&MR).

AP10.4.2. The DoD Component representatives shall:

AP10.4.2.1. Attend all UITC meetings.

AP10.4.2.2. Furnish agenda items to the Chair, UITC.

AP10.4.2.3. Respond to taskings emanating from UITC meetings.

AP10.4.2.4. Identify inter-DoD Component UIT problems to the UITC for discussion and formulation of a solution.

AP10.4.2.5. Present new DoD-level UIT programs to the UITC chair for registration.

AP10.4.2.6. Present recommendation for discontinuation of DoD-level UIT programs.

AP10.4.2.7. Present the DoD Component position and be authorized to negotiate and seek agreement with UITC members to achieve the objectives and standardization for DoD programs.

AP10.5. ADMINISTRATION

Sponsors of UITC members shall fund necessary administrative and travel costs associated with UITC functions.

AP11. APPENDIX 11

CHARTER FOR THE DoD JOINT SMALL ARMS COORDINATING GROUP (JSACG)

AP11.1. PURPOSE

This Charter establishes the DoD JSACG to develop, maintain, and improve the DoD program for tracking, reporting, validating, and registering the status of small arms by serial number.

AP11.2. ORGANIZATION AND MANAGEMENT

AP11.2.1. The program administrator designated by the Director, Defense Logistics Management Standards Office (DLMSO), shall serve as the Chair of the JSACG.

AP11.2.2. The JSACG is comprised of a Chair and representatives of the Military Services, the DLA, and the Systems Administrator for the MILSTRAP. A member of the DUSD(L&MR) staff shall serve as the advisor to the JSACG.

AP11.2.3. The JSACG shall meet at least annually.

AP11.3. FUNCTIONS

The JSACG shall:

AP11.3.1. Coordinate actions essential to the continuing development and operational performance of the DoD Small Arms Serialization Program (DSASP).

AP11.3.2. Ensure DSASP effectiveness and minimize duplication between the DoD Registry and the DoD Component registries.

AP11.3.3. Review the efficiency and effectiveness of the DSASP in achieving established objectives and recommend, through its Chair, to the DUSD(L&MR) policy changes evolving from these reviews.

AP11.3.4. Resolve, if necessary, problems with the DSASP and recommend modifying procedures.

AP11.3.5. Develop, review, and recommend system enhancements for incorporation into the DoD Registry and Chapter 12 of DoD 4000.25-2-M (reference (g)).

AP11.3.6. Furnish agenda items of interest to the Chair, JSACG.

AP11.3.7. Establish performance goals for updating the DoD Registry, reconciling discrepancies between the DoD Registry and DoD Components' records, and responding to the DoD Registry inquiries from the DoD Components and authorized law enforcement agencies.

AP11.4. RESPONSIBILITIES

AP11.4.1. The Chair, JSACG shall:

AP11.4.1.1. Ensure the accomplishment of JSACG objectives and discharge of responsibilities.

AP11.4.1.2. Convene the JSACG at least annually to assess DSASP performance, to recommend DSASP changes, to establish performance goals, and to resolve problems swiftly.

AP11.4.1.3. Establish subgroups when necessary to complete the tasks assigned to the JSACG.

AP11.4.1.4. Submit policy recommendations to the DUSD(L&MR).

AP11.4.1.5. Forward JSACG-recommended system changes and deviations to the MILSTRAP System Administrator.

AP11.4.1.6. Act as the DoD focal point within the Department of Defense and for non-DoD entities, both public and private, working with DoD Registry users to improve system responsiveness, utility, and efficiency.

AP11.4.1.7. Communicate directly with the Heads of the DoD Component registries on matters of interest to the JSACG.

AP11.4.1.8. Submit minutes of each JSACG meeting to the DUSD(L&MR) through the Executive Agent.

AP11.4.1.9. Maintain a current list of DoD Component JSACG members and of DoD Component registries.

AP11.4.1.10. Present problems to the JSACG for resolution.

AP11.4.2. The Military Service and Agency Members shall:

AP11.4.2.1. Attend all JSACG meetings or ensure that alternate Military Service or Agency representation is provided.

AP11.4.2.2. Furnish the Chair a copy of items of interest for the JSACG.

AP11.4.2.3. Respond to taskings emanating from JSACG meetings.

AP11.4.2.4. Present the Military Service or Agency position and be authorized to negotiate and seek agreement with the JSACG members to achieve the goals and objectives of the DoD Small Arms Serialization Program.

AP11.5. ADMINISTRATION

Sponsors of JSACG members shall fund necessary travel and administrative costs associated with JSACG functions.

AP12. APPENDIX 12

CHARTER FOR THE DoD JOINT PHYSICAL INVENTORY WORKING GROUP (JPIWG)

AP12.1. PURPOSE

This Charter establishes the DoD JPIWG to develop, maintain, and improve the program of physical inventory control for DoD supply system materiel.

AP12.2. ORGANIZATION AND MEMBERSHIP

AP12.2.1. The DoD Physical Inventory Control Program Administrator, Defense Logistics Management Standards Office, shall chair the JPIWG.

AP12.2.2. Each of the Military Services and the Defense Agencies maintaining supply system stock shall provide a representative with the necessary physical inventory functional and automatic data processing expertise. Each representative shall have a designated comptroller point of contact with accounting expertise to assist the JPIWG member in accounting matters.

AP12.2.3. The Comptroller of the Department of Defense shall provide one representative, preferably from the Directorate for Accounting Policy.

AP12.3. FUNCTIONS.

The functions of the JPIWG are to:

AP12.3.1. Evaluate the physical inventory control program for DoD supply system materiel and recommend system enhancements as changes to DoD 4000.25-2-M (reference (g)).

AP12.3.2. Resolve inter-Service problems through direct coordination among the JPIWG members.

AP12.3.3. Formulate solutions to problems presented to the JPIWG.

AP12.3.4. Recommend policy changes to the DUSD(L&MR), as necessary.

AP12.4. RESPONSIBILITIES

AP12.4.1. The Chair of the JPIWG shall:

AP12.4.1.1. Ensure the accomplishment of JPIWG objectives and discharge of its responsibilities.

AP12.4.1.2. Convene the JPIWG as required, but at least quarterly, to resolve problems.

AP12.4.1.3. Submit minutes of each JPIWG meeting to the DUSD(L&MR).

AP12.4.1.4. Submit policy recommendations to the DUSD(L&MR).

AP12.4.1.5. Annually develop and submit to the DUSD(L&MR) for approval the Physical Inventory Control Program Plan establishing the JPIWG tasks and milestones for the next 5 years.

AP12.4.1.6. Maintain a current list of representatives to the JPIWG.

AP12.4.1.7. Present problems to the JPIWG for resolution.

AP12.4.2. The Military Service and Agency JPIWG members shall:

AP12.4.2.1. Attend all JPIWG meetings or ensure alternate Military Service and Agency representation is provided.

AP12.4.2.2. Furnish the Chair a copy of items of interest for the JPIWG.

AP12.4.2.3. Respond to taskings emanating from JPIWG meetings.

AP12.4.2.4. Present the Military Service or Agency position and be authorized to negotiate and seek agreement with the JPIWG members to achieve the goals and objectives of the DoD Physical Inventory Control Program.

AP12.5. ADMINISTRATION

Sponsors of JPIWG members shall fund necessary travel and administrative costs associated with JPIWG functions.

AP13. APPENDIX 13

DLMS AND DLSS RESPONSIBILITIES

AP13.1.1. The Deputy Under Secretary of Defense for Logistics and Materiel Readiness (DUSD(L&MR)) shall provide policy guidance, oversight, and direct implementation of and compliance with the DLMS and DLSS except that the Under Secretary of Defense (Comptroller) (USD(C)) shall be responsible for the DLMS Finance functional area and the MILSBILLS; the Director of Defense Procurement (DDP) shall be responsible for the DLMS Acquisition (Contract Administration) functional area and the MILSCAP; and the Under Secretary of Defense For Acquisition and Technology (USD(A&T)) shall be responsible for the MILSPETS. In carrying out their responsibility, the applicable OSD principal staff assistant (PSA) shall:

AP13.1.1.1. Provide the DLMSO with policy guidance for development, expansion, improvement, and maintenance of the DLMS and of the DLSS pending the complete DoD transition from the DLSS to the DLMS. The DLSS shall be deactivated with the DoD-wide implementation of the DLMS.

AP13.1.1.2. Review and approve DLMSO plans, priorities, and schedules.

AP13.1.1.3. Direct or approve expansion of DLMS standards in assigned functional areas or application of DLMS standards in new functional areas.

AP13.1.1.4. Approve or disapprove requests to use a logistics system other than the existing DLMS.

AP13.1.1.5. Resolve policy and procedural issues submitted by the DLMSO that may not be resolved within the DLMSO process.

AP13.1.1.6. Ensure applicable coordination with other OSD staff elements when DLMS or DLSS policy guidance or one-time instructional memoranda affect assigned functions of these elements.

AP13.1.1.7. With the USD(C), ensure the implementation and use of standard data elements, according to DoD Directive 8320.1 (reference (bd)).

AP13.1.2. The Director of the DLMSO shall administer the DLMS, and shall receive policy guidance from the Under Secretary of Defense For Acquisition, Technology, and Logistics (USD(AT&L)), the USD(C), the USD(A&T), and the DDP, as applicable.

AP13.1.2.1. Execute the role of the Department of Defense's Executive Agent for logistics data interchange, as directed in DoD Directive 8190.1 (reference (ay)). In this role, the Director, DLMSO shall take the lead in the coordination of logistics business rules between groups and offices authorized to develop such rules and processes to ensure a common face for logistics both within the Department and with industry.

AP13.1.2.2. Ensure uniform implementation of the DLMS by doing the following:

AP13.1.2.2.1. Reviewing implementation plans and implementation dates of the DoD Components and making recommendations for improvement.

AP13.1.2.2.2. Securing semiannually from the DoD Components the status of implementation of approved DLMS system revisions. (RCS DD-AT&L(AR)1419 applies.)

AP13.1.2.2.3. Establish a Technical Review Committee (TRC) comprised of representatives from the DoD Components and participating external organizations to act on DLMS technical issues.

AP13.1.2.2.4. Establish a Process Review Committee (PRC) composed of representatives from the DoD Components and participating external organizations for each of the DLMS functional areas of acquisition (contract administration), finance, maintenance, supply (including reutilization and marketing), logistics functional data management, and transportation. PRCs are also established for the DoDAAC, the MAPAAC, and customer wait time (CWT) functions. Designate a Chair for each PRC to serve as the DoD control point.

AP13.1.2.2.5. Designate a system administrator for each assigned DLSS to serve as the DoD focal point for that DLSS system or program until such time as the DLSS is deactivated.

AP13.1.2.2.6. Perform analysis and design functions to implement new or revised policy guidance and instructions provided by OSD proponent offices, and to ensure the involvement of telecommunications planning in an integrated system design.

AP13.1.2.2.7. Develop and recommend, to the applicable OSD proponent office, new or revised policy with supporting analysis that identifies and explains process improvements and indicates methods for doing the change.

AP13.1.2.2.8. Maintain a formal configuration control process for the DLMS.

AP13.1.2.2.9. Develop, publish, and maintain the DLMS DoD manual and DLSS-related DLMS publications, consistent with DoD 5025.1-M (reference (bu)).

AP13.1.2.2.10. Develop or evaluate proposed DLMS changes and coordinate them with the DoD Components, and participating external organizations. Provide a copy of all proposed DLMS changes to the applicable OSD proponent office.

AP13.1.2.2.11. Make available, to the DUSD(L&MR) and to the other DoD Components, a status review of all DLMS revision proposals that have not yet been approved for publication, or, that if approved, have not been implemented. (RCS DD-AT&L(AR)1419 applies.)

AP13.1.2.2.12. Review, evaluate, and recommend improvements to curricula of the DoD Component and participating external organization training schools offering DLMS-related courses.

AP13.1.2.2.13. Assist the DoD Components and participating external organizations resolve problems, violations, and deviations that arise during system operations and that are reported to the PRC Chairs. Refer unresolved matters to the applicable OSD proponent office for resolution or corrective action.

AP13.1.2.2.14. Review and coordinate with the DoD Components, and participating external organizations, all requests for system deviations and exemptions and make applicable recommendations to the OSD proponent office based on fact-finding studies or analysis of accompanying justification.

AP13.1.3. The Heads of the DoD Components and Other Participating Organizations shall:

AP13.1.3.1. Designate an office of primary responsibility for each DLMS functional area, and the functions of the CWT, DoDAAD, and MAPAD, to serve as the DoDComponent control point. Identify to the DLMSO the name of a primary and alternate representative for each DLMS functional area. The office designated as primary responsibility for each DLMS functional area shall:

AP13.1.3.1.1. Serve as members on, and fulfill the responsibilities of, the PRC for that function.

AP13.1.3.1.2. Provide the DoD Components or external organization's position on DLMS matters and have the authority to make decisions regarding procedural aspects.

AP13.1.3.1.3. Ensure continuous liaison with the DLMS functional area PRC Chair and with the other DoD Components and participating external organizations.

AP13.1.3.1.4. Submit to the Director, DLMSO, or appropriate PRC Chair of DLMS PRCs, all proposed changes affecting logistics business processes irrespective of electronic business technology employed. Perform the initial evaluation of proposed changes that originate within the DoD Component or participating external organization and return such proposals with the evaluation results. Forward only those proposed DLSS changes that are deemed critical or essential to correct operational readiness deficiencies, or to implement process improvements.

AP13.1.3.1.5. Perform the initial evaluation of beneficial suggestions to the DLMS and the DLSS originating within the DoD Component or participating external organization. For suggestions considered worthy of adoption, submit a proposed DLMS change to the DLMSO for processing in the normal manner. The originator's PRC representative shall determine any awards using normal DoD Component or participating external organization procedures.

AP13.1.3.1.6. Develop and submit to the functional area PRC Chair a single, coordinated DoD Component or participating external organization position on all proposed DLMS changes within the time limit specified. When a proposed DLMS change affects multiple-DLMS functional areas, the control point for the PRC identified in the proposal shall submit the single coordinated response.

AP13.1.3.2. Do internal training to ensure timely and effective implementation and continued operation of the approved DLMS. Review, evaluate, and update, at least annually, curricula of internal training programs to ensure adequacy of training. Send a copy of the initial and revised training curricula to the DLMSO.

AP13.1.3.3. Implement the approved DLMS and changes thereto. Provide the DLMSO a semiannual status information report on implementation of approved changes (RCS DD-A&T(Q&SA)1419 applies.) Report information by May 1 and November 1 for each approved change. Begin reporting the first period following publication of the approved DLMS change. Stop reporting after identifying the approved change as fully

implemented. In the final report, cite the DoD Component or participating external organization implementing DoD Publication(s) and change number(s) and identify the operating system or subsystem involved. Attach a copy of the DoD Publication change or provide electronically. Send reports to the DLMS functional area PRC Chair by May 30 and November 30 of each year.

AP13.1.3.4. Ensure that operating activities supporting the DLMS comply with the requirements and procedures published in the DLMS manual.

AP13.1.3.5. Continually review and revise internal procedures to correct misinterpretation and drop and prevent duplication of records, reports, and administrative functions related to the DLMS.

AP13.1.3.6. Report to the functional area PRC Chair DLMS problems, violations, and deviations that arise during system operations.

AP13.1.3.7. Furnish to the appropriate functional area PRC Chair copies of supplemental and internal procedures, and changes thereto, related to operation of approved systems.

AP13.1.4. Process Review Committees (PRCs). The PRCs are joint forums for each of the DLMS functional areas responsible for the development, expansion, improvement, maintenance, and administration of the DLMS. The DLMS PRCs shall:

AP13.1.4.1. Be administered and/or controlled by the DLMS PRC Chair for the functional area.

AP13.1.4.2. Consist of representatives from the DoD Components and participating external organizations.

AP13.1.4.3. Meet at least quarterly, and more frequently, as needed. The PRC Chair shall, when possible, announce the meeting and identify the agenda items 30-calendar days in advance of the meeting. The PRC Chair shall also issue fully documented minutes of these proceedings to each participating DoD Component or external organization, and the applicable OSD PSA, within 30-calendar days after the meeting.

AP13.1.4.4. Review and resolve comments on proposed DLMS changes, deviations, and waivers and provide recommendations for implementation or disapproval. Refer any action that the PRC cannot resolve to the appropriate OSD PSA. Disapprove proposed DLMS changes by unanimous agreement of the PRC.

AP13.1.4.5. Review and resolve documented problems, violations, and deviations. Refer such problems that the PRC cannot resolve to the applicable OSD PSA.

AP13.1.4.6. Ensure uniform and effective implementation of DLMS requirements by:

AP13.1.4.6.1. Conducting periodic evaluations to determine the effectiveness of DLMS and DLSS policy, procedures, and processes.

AP13.1.4.6.2. Conducting reviews, through on-site visits, of selected DLMS operational areas to determine conformance with, and evaluate the effectiveness of, DLMS and DLSS requirements and to interpret or provide clarification of DLMS procedures.

AP13.1.4.6.3. Reporting the findings and recommendations of evaluations and reviews, with comments of the DoD Components and participating external organizations concerned, to the applicable OSD PSA.

AP13.1.5. DLSS Focal Point Committees

AP13.1.5.1. The DLMS functional area PRCs replace and assume the responsibilities of most DLSS Focal Point Committees. The PRCs replace the Focal Point Committees as follows:

AP13.1.5.1.1. Supply PRC: MILSTRIP, MILSTRAP, SDR, and MILSPETS.

AP13.1.5.1.2. Finance PRC: MILSBILLS.

AP13.1.5.1.3. Transportation PRC: MILSTAMP has been replaced by the Defense Transportation Regulation, which is administered by the U.S. Transportation Command (USTRANSCOM). The DLMS transportation function is administered by the Director, DLMSO, who shall designate the Transportation PRC Chair.

AP13.1.5.1.4. Acquisition (Contract Administration) PRC: MILSCAP.

AP13.1.5.1.5. CWT PRC: LMARS.

AP13.1.5.1.6. DoDAAD PRC: DoDAAD.

AP13.1.5.1.7. MAPAD PRC: MAPAD.

AP13.1.6. Technical Review Committee (TRC). The DLMS TRC is a joint forum for discussion of technical issues related to the development of PRCs submitted to the DLMSO for evaluation, development, and implementation. The DLMS TRC shall work in concert with the DLMS PRC as the advisory body on all technical issues. The DLMS TRC shall:

AP13.1.6.1. Be administered and/or controlled by the TRC Chair.

AP13.1.6.2. Be chaired by the Director, DAASC, or his/her designated representative.

AP13.1.6.3. Consist of a single representative from each of the CDAs of the Army, the Navy, the Air Force, the Marine Corps, the DLA, the U.S. Coast Guard, the National Security Agency (NSA), the Federal Aviation Agency (FAA), and the General Services Administration (GSA). A representative of the USTRANSCOM and the Defense Information Systems Agency (DISA) shall also be included, but shall only vote in those matters affecting their respective activities.

AP13.1.6.4. Meet at least quarterly, and more frequently, as needed. The Chair shall announce the meeting and identify the agenda items 30-calendar days before the meeting. The TRC Chair shall issue fully documented minutes of these proceedings to each participating member and other interested parties within 30-calendar days after the meeting.

AP13.1.6.5. Provide an advisory role on technical issues associated with the DLMS.

AP13.1.6.6. Provide the technical support to the DLMSO to execute the proposed DLMS change process.

AP13.1.6.7. Identify and develop technical requirements for inclusion in the proposed DLMS change package for staffing with the DoD Components.

AP13.1.6.8. Provide the technical evaluation of all DoD Component comments received as a result of staffing the proposed DLMS change package.

AP13.1.6.9. Provide technical input for the preparation of the proposed DLMS change implementation package.

AP13.1.6.10. Determine costs associated with the technical requirements for the implementation of the proposed DLMS change package.

AP13.1.6.11. Provide technical assistance to the DoD Components during the implementation and provide technical oversight after the implementation of the proposed DLMS change.

AP13.1.7. Central DLMS Activity (CDA). The DAASC is the CDA for implementing DLMS data transmission requirements and shall execute system modification taskings from the DLMSO. The DAASC is the central node for all DLMS transactions. The DoD Components shall route all DLMS transactions to the DAASC. The DAASC shall provide telecommunications support, archiving and storage, translation services, ASC X12/DLSS conversion processes, and other services to support DoD Component implementation of the DLMS. The DAASC, as the corporate community service provider and as the Department of Defense's central point for providing supply-chain information, shall capture required data and produce the end-to-end metrics necessary for achieving the key objectives required to improve logistics support to the customer. Additional CDA duties include conducting physical configuration audits and facilitating functional configuration audits that ensure a configuration item complies with the DLMS physical or functional configuration identification.

AP14. APPENDIX 14

LEVELS OF PROTECTION

AP14.1.1. Level of protection is defined as a means of specifying the level of military preservation and packing that a given item requires to ensure that it is not degraded during shipment and storage.

AP14.1.2. These levels of protection are specified in MIL-STD-2073-1 (latest version²⁰):

AP14.1.2.1. Military Level of Preservation. Preservation designed to protect an item during shipment, handling, indeterminate storage, and distribution to consignees worldwide.

AP14.1.2.2. Military Levels of Packing

AP14.1.2.2.1. Level A. Protection required to meet the most severe worldwide shipment, handling, and storage conditions. A Level A pack shall, in tandem with the applied preservation, be capable of protecting material from the effects of direct exposure to extremes of climate, terrain, and operational and transportation environments. Examples of situations that indicate a need for use of Level A pack are: war reserve stocks, mobilization, strategic and theater deployment and employment, open storage, and deck loading. Examples of containers used for Level A packing requirements include overseas-type wood boxes, and plastic and metal reusable containers.

AP14.1.2.2.2. Level B. Protection required to meet moderate worldwide shipment, handling, and storage conditions. A Level B pack shall, in tandem with the applied preservation, be capable of protecting material not directly exposed to extremes of climate, terrain, and operational and transportation environments. Examples of situations that indicate a need for use of Level B pack are: security assistance (e.g., Foreign Military Sales (FMS)) and containerized overseas shipments. Examples of containers used for Level B packing requirements include domestic wood crates, weather-resistant fiberboard containers, fast-pack containers, weather-resistant fiber drums, and weather-resistant paper and multi-wall shipping sacks.

²⁰ See URL <http://www.dscc.dla.mil/offices/packaging/specstdslist.html>.

AP14.1.3. Although not specified in MIL-STD-2073-1, commercial packaging provides the following level of protection:

AP14.1.3.1. Level C. Protection provided by using commercial packaging. DoD packaging personnel will determine if commercial packaging is adequate and that commercial packaging that is prescribed by the manufacturer should be used. In these cases, MIL-STD-2073-1 does not apply. Containers used by commercial suppliers must conform to the requirements of the American Society for Testing and Materials (ASTM) D3951.²¹

²¹ See URL <http://www.dscc.dla.mil/offices/packaging/specstdslist.html>.

AP15. APPENDIX 15

CHARTER FOR THE DEFENSE PACKAGING POLICY GROUP (DPPG)

AP15.1. OBJECTIVES

The DPPG is a permanent forum established to develop and recommend changes to policy, guidance, and standardization of packaging throughout the Military Services and the DLA. Special areas of interest include:

AP15.1.1. New and/or improved packaging equipment, methods, and concepts.

AP15.1.2. Engineering and data development.

AP15.1.3. Training.

AP15.1.4. Increased productivity and overall cost improvement and effectiveness.

AP15.1.5. International and domestic packaging and transportation requirements and/or changes.

AP15.1.6. Environmental issues and/or mandates.

AP15.1.7. Implementation and transition for Defense Management Reform and factors relative to packaging and/or system support.

AP15.1.8. Military packaging standardization and simplification.

AP15.2. RESPONSIBILITIES

The DPPG is responsible for operating under sections AP15.3. and AP15.4., below, and for initiating issues and resolving differences. Specific membership is recommended using selection criteria developed by the DPPG. The DPPG shall be chaired at 2-year intervals by the members in the order of rotation identified in paragraph AP15.4.1., below. In the absence of the Chair, the Executive Secretary (ES) shall assume that duty. The DPPG is composed of packaging managers from:

AP15.2.1. The Army Materiel Command Logistics Support Activity Packaging Storage, and Containerization Center (AMC LOGSA PSCC) (AMXLS-TP-P).

AP15.2.2. The Naval Inventory Control Point, Mechanicsburg (M077).

AP15.2.3. HQ, Air Force Materiel Command (AFMC) Logistics Support Office (Packaging).

AP15.2.4. HQ, United States Marine Corps, Deputy Commandant for Installation and Logistics.

AP15.2.5. HQ, Defense Logistics Agency (DLA-J3).

AP15.2.6. HQ, Defense Contract Management Agency (DCMA) (OCT).

AP15.3. FUNCTIONS

AP15.3.1. DPPG members shall provide and/or exchange information and develop, coordinate, and recommend DoD packaging policy, work together to detect and recommend solutions to packaging policy problems, and promote the standardization of packaging within the Department of Defense. Consideration shall be given to individual Service and/or Agency-unique requirements.

AP15.3.2. The DPPG shall provide a forum to advise the School of Military Packaging Technology (SMPT) on the development and improvement of DoD packaging and training, and ensure that SMPT programs respond to DoD needs. Members shall assist the SMPT staff in developing new packaging programs of instruction, correct deficiencies identified in course contents, and pursue joint resolution of packaging training concerns and/or problems. Recommendations by members for the establishment of new courses of instruction to meet individual or collective Service needs shall be forwarded to the SMPT by the Chair.

AP15.3.3. The DPPG shall establish working groups, as required, to improve operational packaging techniques, study and resolve specific packaging issues common to the Services, the DLA, and the DCMA to avoid duplication of effort; and promote standardization.

AP15.3.4. The DPPG shall conduct an annual awards program for excellence and achievement in packaging, as presented in Attachment 1 to this Appendix.

AP15.4. PROCEDURES

AP15.4.1. Organization. The Chair of the DPPG shall rotate among the DoD Component members at 2-year intervals in the following order: Air Force, Army,

Marine Corps, Navy, DLA, and the DCMA. Each member shall also serve as the Executive Secretary (ES) in the 2-year period prior to assuming the chair.

AP15.4.2. Meetings. The DPPG shall meet semiannually or at the call of the Chair, who shall designate the dates and location of the meeting, and notify the ES. The ES shall notify the DPPG membership and invited activities and request proposed agenda topics at least 60 days before the meeting date.

AP15.4.3. Agenda. Members shall provide proposed agenda topics, with talking papers, to the ES and other members 30 days before the meeting. The ES shall develop and distribute the final agenda at least 15 days prior to the meeting.

AP15.4.4. Minutes. The ES shall prepare the meeting minutes and submit them to the Chair within 30 days after each meeting.

AP15.4.5. Travel Funds. The participating organizations shall provide travel funds for their members to participate in the DPPG meetings.

AP15.4.6. Decision-making Process. The DPPG is a decision-making group that develops packaging policy for the DoD Components. Proposed policy changes shall be submitted to the appropriate DoD and/or Joint Service preparing activity and staffed through the normal standardization process. Policy decisions shall be determined in this manner:

AP15.4.6.1. Discuss the issue, provide input, and/or request more information, if necessary.

AP15.4.6.2. Discuss alternatives.

AP15.4.6.3. Determine by collective voice vote if consensus, i.e., general agreement, has been reached.

AP15.4.6.4. If consensus has not been reached, identify points of conflict and agreement, and attempt to negotiate a solution.

AP15.4.6.5. If consensus still has not been reached, a motion on the issue must be made and passed by a majority vote. If the vote results in a tie, the proposal fails for lack of a majority vote.

AP15.4.6.6. Detailed rebuttals concerning majority-approved issues may be made in writing to the Chair not later than 45 days after publication of the meeting minutes, for timely review and decision. Rebuttals must be fully substantiated to support opposing positions.

AP15.4.7. Communication. All DPPG members may communicate directly with the Chair.

AP15.4.8. Guests. Members shall be responsible for the invitation of their respective Military Service and/or Agency guests. To maintain the effectiveness of the DPPG, guests should be limited to those who may contribute significantly to the established agenda. Guest attendance is subject to approval by the Chair, or the ES in the absence of the Chair.

AP15.A1. ATTACHMENT 1 TO APPENDIX 15

PACKAGING AWARDS FOR EXCELLENCE AND ACHIEVEMENT

AP15.A1.1. PURPOSE OF AWARDS

By bestowing awards for packaging excellence and achievement, the DPPG shall recognize and honor the most outstanding individuals in the DoD packaging community who have contributed significantly to the packaging effort. This Attachment prescribes the policies, procedures, and guidelines to:

AP15.A1.1.1. Set forth selection criteria and establish the award categories.

AP15.A1.1.2. Provide the annual award to:

AP15.A1.1.2.1. Increase interest in packaging development, productivity, and efficiency throughout the Department of Defense.

AP15.A1.1.2.2. Improve the overall visibility of DoD packaging functions and accomplishments.

AP15.A1.1.2.3. Recognize the achievements of personnel who perform packaging "above and beyond" normal duties.

AP15.A1.2. APPLICABILITY OF AWARDS

The awards program applies to DoD personnel who directly or indirectly perform packaging functions and/or contributed significantly to the DoD packaging program.

AP15.A1.3. RESPONSIBILITIES FOR AWARDS

AP15.A1.3.1. The DPPG members shall:

AP15.A1.3.1.1. Evaluate the award package submissions and select, by majority vote, an award recipient for each nominated category.

AP15.A1.3.1.2. Approve the design of the plaques and certificates to be awarded.

AP15.A1.3.1.3. Provide the names and categories of the award recipients to the DPPG Chair or Executive Secretary by March 1 for the previous year (e.g., 2003 awards should be submitted by March 1, 2004).

AP15.A1.3.1.4. Each member shall rotate as the DPPG awards point of contact every 2 years in the following order: Air Force, Army, Marine Corps, Navy, DLA, and DCMA.

AP15.A1.3.1.5. Develop award publicity and distribute the information to generate competition for the awards.

AP15.A1.3.2. Nominators should:

AP15.A1.3.2.1. Submit no more than one nomination (person or group) in each category for each award year.

AP15.A1.3.2.2. Forward all requested documentation to the DPPG awards point of contact by November 1.

AP15.A1.3.3. The supervisor of a nominee shall prepare a letter of recommendation to be forwarded with the award nomination submission. If the first-line supervisor is the nominator, the second-line supervisor shall prepare the letter of recommendation.

AP15.A1.4. AWARDS CATEGORIES

AP15.A1.4.1. DPPG Packaging Excellence Award

AP15.A1.4.1.1. The nominee (or group) shall be a General Schedule (GS) or military equivalent (officer).

AP15.A1.4.1.2. The nominee shall be within the packaging community or directly related fields (e.g., a packaging specialist, technologist, engineer, chemist, instructor, or similar positions).

AP15.A1.4.2. DPPG Packaging Achievement Award

AP15.A1.4.2.1. The nominee (or group) shall be wage schedule (WG, WL, or WS) or military equivalent (enlisted).

AP15.A1.4.2.2. The nominee shall work in the packaging field.

AP15.A1.5. ELIGIBILITY REQUIREMENTS FOR AWARDS

AP15.A1.5.1. The employee shall have been assigned to the nominating activity.

AP15.A1.5.2. When an employee's nomination is based on a single outstanding event, the event (or sustained performance) shall have been completed during the year of nomination.

AP15.A1.6. NOMINATION CRITERIA FOR AWARDS

Nominations should be based on at least one of the following:

AP15.A1.6.1. An initiated and/or recommended policy, procedure, or operational change that resulted in a documented reduction in man-hours, costs, or simplified and/or reduced administrative duties.

AP15.A1.6.2. Suggestion awards, accepted value engineering change proposals, validated cost reductions, or cost-avoidance actions.

AP15.A1.6.3. Documented self-improvement training that is non-mandatory, performed after duty hours, and is mission-oriented.

AP15.A1.6.4. Official performance awards received; e.g., Exceptional and/or Outstanding Performance Appraisal, Sustained Superior Performance Award, and/or Special Act Award. An award background statement is required.

AP15.A1.6.5. Significant system and/or operation improvements or enhancements.

AP15.A1.6.6. Significantly increased and/or consistently outstanding production and job performance.

AP15.A1.6.7. Novel or unique packaging designs, or redesigns, resulting in more efficient or cost-effective packages.

AP15.A1.7. AWARDS PROCEDURES

AP15.A1.7.1. Any person in the packaging field and/or community may nominate any other person or group, so long as the established limits of this Attachment are followed.

AP15.A1.7.2. Nomination packages shall include the following:

AP15.A1.7.2.1. Employee name(s) and the category for which the employee is being nominated.

AP15.A1.7.2.2. Biographical summary of the employee(s). The summary should include length of service, dates of service, promotions, self-development endeavors, and educational background, as applicable.

AP15.A1.7.2.3. Specific justification and accomplishments in one or more of the areas identified in the nomination criteria in section AP15.A1.6., above.

AP15.A1.7.2.4. A letter of recommendation from the nominee's immediate supervisor or second-level supervisor if the immediate supervisor is the nominator.

AP15.A1.8. PRESENTATION OF AWARDS

AP15.A1.8.1. The date and location of the awards ceremony shall be determined and award recipients notified.

AP15.A1.8.2. A plaque, and a 1-year membership in the National Institute of Packaging, Handling, and Logistic Engineers shall be presented to the individual recipients.

AP15.A1.8.3. The recipient's parent organization is responsible for providing associated funds for travel.

AP16. APPENDIX 16INSTRUCTIONS FOR ELECTRONIC SSIR REPORTING

AP16.1.1. Each DoD Component shall submit a single computer-generated spreadsheet file as its input to the SSIR.

AP16.1.2. That file shall include the following reporting data:

AP16.1.2.1. Header data as shown.

Table AP16.T1. SSIR Spreadsheet Header Data

Cell	Item	Explanation and/or Instruction
A1	DoD Component	Enter DoD Component name
A2	As of Date	Enter "as of date"

AP16.1.2.2. Line item data for both principal and secondary items as shown.

Table AP16.T2. SSIR Spreadsheet Line Item Data

Column	Item	Explanation and/or Instruction
A	FY	Enter fiscal year.
B	DoD Component	A-- The Department of the Army N -- The Department of the Navy M-- The Marine Corps F -- The Department of the Air Force D -- The Defense Logistics Agency
C	Principal Item Category	For principal items only, enter category for materiel; leave blank for secondary items. See subparagraph C12.3.2.1.2.1., above, for principal item categories.
D	Principal or Secondary Items	Enter "P" or "S."
E	Retail or Wholesale Items	Enter "R" or "W."
F	Consumable or Repairable Items	Enter "C" or "R."
G	Source of Funding Code	Enter applicable code (for example: RF -- Revolving Fund; OM-- Operation & Maintenance; IF -- Investment Fund).
H	Approved Acquisition Objective	Enter \$ value of materiel. For secondary items only.
I	War Reserve Stock	Enter \$ value of materiel. Memo entry, also included in column H. For secondary items only.
J	Intransit Stock	Enter \$ value of materiel. For secondary items only.
K	Economic Retention Stock	Enter \$ value of materiel. For secondary items only.
L	Contingency Retention Stock	Enter \$ value of materiel. For secondary items only.
M	Potential Security Assistance Stock	Enter \$ value of materiel. Memo entry, also included in column L. For secondary items only.
N	Potential Reutilization and/or Disposal Stock	Enter \$ value of materiel. For secondary items only.
O	Total Assets	For secondary items, this entry must equal the sum of all the assets (sum of columns H, J, K, L and N). For principal items, enter total inventory amount.

AP17. APPENDIX 17INDEXA

acquisition, C1.3.1.3., C1.3.2.9., C1.4.1.2.2., C1.5.1.1., C2.2.1.1., C2.2.1.1.1., C2.2.1.1.2., C2.2.1.1.3., C2.2.2.1.1., C2.6.3.1.3., C2.6.3.1.4., C2.6.3.1.4.2., C2.6.3.2.2.2., C2.6.3.2.2.2.1., C2.6.3.2.3., C2.6.3.2.4., C2.6.3.2.4.3.3., C2.6.3.2.4.6., C2.9.1.3., C3.1.1.2.3., C3.1.1.2.3.1., C3.1.1.3., C3.1.2.1.1., C3.1.2.1.2., C3.2.3.1.3., C3.3.1.1., C3.3.1.1.1., C3.3.1.1.3., C3.3.1.2., C3.3.1.2.1., C3.3.1.2.2., C3.3.1.3., C3.3.1.3.1., C3.3.2.1.1., C3.3.2.1.2., C3.5.2.2., C3.5.2.3., C3.6.1.1., C3.6.1.2., C3.6.2.3., C3.6.2.4.3., C5.5.2.3., C6.4.1.3., C7.3.1.4.3., C7.4.1.1.2., C8.1.1.1.2., C8.1.1.2.2.2., C8.2.2.2.5., C8.5.2.4., C8.5.2.5., C8.5.2.11.6., C8.5.2.11.11., C8.5.2.12.1., C8.5.2.12.3., C8.6.1.1., C8.6.2.2.2.12., C8.7.2.13., C9.2.1.2., C9.2.1.2.1., C9.2.1.2.2., C9.3.2.1.1.2., C9.3.6.2.1., C9.5.2.1.1., C9.5.2.1.4.1., C9.5.2.1.4.2., C9.5.2.1.4.3., C9.5.2.1.4.8., C9.5.2.2., AP1.1.7.3., AP1.1.119.2., AP1.1.157., AP2.1.3., AP13.1.2.2.4.

acquisition lead time, C2.6.3.1.3., C2.6.3.1.4., C2.6.3.1.4.2., C2.6.3.2.4., C2.6.3.2.4.6.

administrative lead time (ALT), C2.6.3.1.4.1., C2.6.3.2.2.2., C2.6.3.2.4., C2.6.3.2.4.2., C2.6.3.2.4.5., AP1.1.1., AP1.1.3.

ammunition, C2.6.1.1.2., C2.8.1.1.1., C5.5.1.1., C5.7.5.2.3., C5.7.8.2.2., C5.9.2.2., C5.10.1.5.1., C6.2.2.2.2.2., C9.1.1.1., C9.2.1.2.1., C9.2.2.1.2., C9.2.2.2.2., C9.3.1.1.1., C9.3.1.1.2., C9.3.1.2.1., C9.3.1.2.2., C9.3.2.2.2.1., C9.3.2.2.3., C9.3.3.1.2., C9.3.3.1.3., C9.3.6.1.1., C9.3.6.1.2., C9.3.6.2.1., C9.3.6.2.2., AP1.1.17.2., AP1.1.140.

analytical capability, C5.2.2.2.1.

approved acquisition objective (AAO), C2.8.1.1.1., C2.8.1.1.1.1., C2.8.1.1.1.2., C2.8.1.1.1.3., C2.8.1.1.3., C5.10.1.1.1., C9.1.2.2.2., C9.3.2.2.1.1.1., AP1.1.4.

asset, C2.1.1.2., C2.1.2.3., C2.1.2.3.1.1., C2.1.2.3.1.2., C2.4.1.3., C2.4.2.2., C2.6.1.2.3.2., C2.6.1.2.3.4., C2.6.3.2.4.2.1., C2.6.4.2.1., C4.3.2.1., C4.4.2.2., C5.2.2.2.5., C5.7.1.1.1., C5.7.3.1., C5.7.3.2.4.1., C5.7.3.2.8.1., C5.7.4.2.3., C5.7.5.1.2., C5.8.1.1., C5.8.2.1., C6.1.1.2., C6.1.2.2.2., C6.1.2.2.3., C6.1.2.2.6., C6.3.1.1., C6.3.2.1.1.1., C8.1.1.2.2.4., C8.6.2.1.1.4., C9.1.2.1., C9.3.2.1.1.4.2., AP1.1.117., AP1.1.120., AP1.1.165., AP3.1.3.5., AP6.3.4.1., AP6.3.5.1., AP6.3.5.2., AP6.3.5.3., AP9.2.1.3.5.10.

in-process asset, AP1.1.50.

in-storage asset, AP1.1.51.

intransit asset, 92, C5.8., AP1.1.62.

automated identification technology (AIT), C1.4.2.7., C5.6.1.4., C5.6.1.7., C5.7.1.1.4., C5.7.3.2.3., C5.7.3.2.6., C5.7.4.2.5., C7.2., 109, C7.2.1.1., C7.2.1.2.1., C7.2.1.2.1.1., C7.2.1.2.2., C7.2.2., C7.2.2.1., C7.2.2.3.

B

best value, C1.1.2., C1.3.1.3., C3.2.1.1.2., C3.2.1.2.1., C3.2.2.1.1., C3.2.2.1.3., C3.3.1.1.1.1., C3.3.1.1.2., C4.2.2.1., C4.3.1.2.1., C4.3.2.4., C4.4.1.1.2., C5.1.1.2., C5.2.1.1.1., C5.2.2.1.1., C5.2.2.1.1.2., C5.2.2.2.1., C5.4.1.5.,

C

cancellation, C3.7.2.1., C3.7.2.3., C5.3.1.3., C6.1.2.2.5., AP1.1.8. AP8.4.1.2.

care of supplies in storage (COSIS), C5.7.6., C5.7.6.1.1., C5.7.6.1.2., C5.7.6.1.3., C5.7.6.1.4., C5.7.6.2., AP1.1.9.

cataloging, C1.2.1., C2.2.2.2.4., C2.9.2.6., C8.1.1.1.1., C8.1.1.2., C8.1.1.4., C8.1.1.4.2., C8.1.1.5., C8.1.1.5.3., C8.1.1.6., C8.1.1.7., C8.5.2.11.7., AP1.1.10., AP1.1.73., AP7.4.2.

commercial logistics support (CLS), C4.1.1.1.1., C4.4., C4.4.1.1., C4.4.1.2., C5.1.1.3.

commercial packaging, C8.7.1.2., C8.7.2.4., C8.7.2.5., C8.7.2.6., C8.7.2.7., AP14.1.3., AP14.1.3.1.

commercial source, C1.3.2.1.2., C1.4.1.2.3., C2.4.2.3., C2.4.2.5., C3.1.1.2.1., C3.2.4.2.2., C3.6.2.4.5., C3.8.1.6.1., C4.1.1.1., C4.1.1.1.1., C4.1.1.1.2., C4.1.2.2., C4.1.2.3., C4.3.1.2.4., C4.4.1.1.3., C4.4.1.1.3.1., C5.2.2.1.1., C5.3.1.1.2., C6.2.1.3.

consumable item, C2.3.2.1.2., C2.6.2.2.1., C2.6.2.2.5.3., C2.6.4.2.3., C3.2.3.1.4.2.1., C3.4.1.4.3., C4.2.2.3., C5.3.1.1.5.4., C9.2.2.1.2., AP1.1.11.9., AP1.1.148., AP2.2.1.6.

consumer level of supply, C3.2.6.1.1.2.

container consolidation point (CCP), C8.8.1.5., AP1.1.16., AP8.1.4.1., AP8.1.4.2., AP8.1.4.3.2., AP8.T1., AP8.T2., AP8.T3.

contingency retention munitions stock (CRMS), C9.3.2.1.1.3., C9.3.2.1.1.4., C9.3.2.2.1.1., C9.3.2.2.1.2.1., C9.3.2.2.2.2., C9.3.3.2.2.,

contingency retention stock (CRS), C2.8.1.1.1., C2.8.1.1.1.3., C2.8.1.1.2., C2.8.1.1.3., C2.8.1.2.4.

contractor support, C2.2.2.3.1., C3.2.2.1.2.7., AP1.1.98., AP2.2.3.2.

controlled inventory item, C5.2.2.1.2.1., C5.7.5.2.7.3.

cooperative logistics supply support agreements (CLSSA), C2.5.2.2., C2.6.1.1.5., C2.8.1.2.4.2.

credit, C3.2.4.2.1., C5.5.2.3., C6.2.1.3., C6.2.2.3., C6.3.2.2., C6.4.1.3., C6.4.1.4., C9.5.2.2., AP1.1.101.

critical safety item (CSI), C8.5., C8.5.1.1., C8.5.1.3., C8.5.2.1., C8.5.2.2., C8.5.2.3., C8.5.2.4., C8.5.2.5., C8.5.2.6., C8.5.2.7., C8.5.2.7.1., C8.5.2.8., C8.5.2.8.1., C8.5.2.9., C8.5.2.10., C8.5.2.11.1., C8.5.2.11.2., C8.5.2.11.3., C8.5.2.11.4., C8.5.2.11.5., C8.5.2.11.6., C8.5.2.11.7., C8.5.2.11.9., C8.5.2.11.10., C8.5.2.11.11., C8.5.2.11.12., C8.5.2.11.13., C8.5.2.11.15., C8.5.2.12.1., C8.5.2.12.2., C8.5.2.12.3., C8.5.2.12.5., C8.5.2.12.6., C8.5.2.12.6.1., C8.5.2.12.6.2., C8.5.2.12.6.3., C8.5.2.12.6.4., AP1.1.7., AP1.1.7.1.

customer wait time, C3.3.2.4.2., C4.4.1.2., C5.2.2.1.3., C5.3.2.4., C6.3.2.2., AP8.1.1.1., AP13.1.2.2.4.

D

data management, C2.2.1.1.1.1., C7.1.2.1., C7.4.2.1.1., C8.6.2.2.1.1.2., C8.6.2.2.1.1.4., AP13.1.2.2.4.

data repository, C7.3.2.1.1., C7.4.2.1.1.

defective materiel, C1.4.1.2.5., C6.2.1.1., C6.2.1.3., C6.2.2.2.2., C6.2.2.2.2.3., C6.2.2.3.

Defense Inactive Item Program (DIIP), C2.9.1.1., C2.9.2.3., C2.9.2.7., C3.2.5.2.1.8.

Defense Logistics Information Service (DLIS), C2.2.2.2.4., C2.9.1.5., C5.7.3.2.9.2.4., C8.1.1.2., C8.1.1.3., C8.1.1.4., C8.1.1.4.1., C8.1.1.4.2., C8.1.1.6., C8.1.2.2., AP1.1.21.

Defense Logistics Management Standards Office (DLMSO), C5.7.3.2.10., C5.7.4.5., C5.7.5.2.8., C5.11.2.7., C8.6.1.1.3., C8.6.1.1.10., C8.6.1.2.1., C8.6.1.2.2.1., C8.6.1.2.5., C8.6.1.2.6., C8.6.2.1.1.3., C8.6.2.1.1.5., C8.6.2.1.2., C8.6.2.1.3., AP10.2.1., AP11.2.1., AP12.2.1., AP13.1.1.1. AP13.1.1.2., AP13.1.1.5., AP13.1.2., AP13.1.2.1., AP13.1.3.1., AP13.1.3.1.4., AP13.1.3.1.5., AP13.1.3.2., AP13.1.3.3., AP13.1.6., AP13.1.6.6., AP13.1.7.

Defense Logistics Management System (DLMS), C3.8.1.7., C5.7.3.2.1.4, C5.3.1.7., C5.7.3.2.10.1., C5.7.3.2.10.3., C5.7.4.6., C5.7.4.7., C5.7.5.2.9.1., C5.8.2.10., C8.6.1., C8.6.1.1., C8.6.1.1.1., C8.6.1.1.2., C8.6.1.1.3., C8.6.1.1.4., C8.6.1.1.5., C8.6.1.1.6., C8.6.1.1.7., C8.6.1.1.8., C8.6.1.1.11. C8.6.1.2.1., C8.6.1.2.2., C8.6.1.2.2.1., C8.6.1.2.2.2., C8.6.1.2.2.3., C8.6.1.2.3., C8.6.1.2.4., C8.6.1.2.4.4., C8.6.1.2.7., C8.6.1.2.8., AP10.3.6., AP13., AP13.1.1., AP13.1.1.1., AP13.1.1.3., AP13.1.1.4., AP13.1.1.6., AP13.1.2., AP13.1.2.2., AP13.1.2.2.2., AP13.1.2.2.3., AP13.1.2.2.4., AP13.1.2.2.8., AP13.1.2.2.9., AP13.1.2.2.10., AP13.1.2.2.11., AP13.1.3.1., AP13.1.3.1.2., AP13.1.3.1.3., AP13.1.3.1.4., AP13.1.3.1.5., AP13.1.3.1.6., AP13.1.3.2., AP13.1.3.3., AP13.1.3.4., AP13.1.3.5., AP13.1.3.6., AP13.1.4., AP13.1.4.1., AP13.1.4.4., AP13.1.4.6., AP13.1.4.6.1., AP13.1.4.6.2., AP13.1.5.1., AP13.1.5.1.3., AP13.1.6., AP13.1.6.5., AP13.1.6.6., AP13.1.6.7., AP13.1.6.8., AP13.1.6.9., AP13.1.6.10., AP13.1.6.11., AP13.1.7.

Defense Packaging Policy Group (DPPG), C8.7.2.12., C8.7.2.21., AP15., AP15.1., AP15.2., AP15.3.1., AP15.3.2. AP15.3.3., AP15.3.4., AP15.4.1., AP15.4.2., AP15.4.5., AP15.4.6., AP15.4.7., AP15.4.8., AP15.A1.1., AP15.A1.3.1., AP15.A1.3.1.3., AP15.A1.3.1.4., AP15.A1.3.2.2., AP15.A1.4.1., AP15.A1.4.2.

Defense Reutilization and Marketing Office (DRMO), C8.5.2.9., C8.5.2.11.12., C8.5.2.11.13., C8.5.2.11.15., AP1.1.22.

Defense Reutilization and Marketing Service (DRMS), C2.1.2.3.2., C2.8.1.1.3., C5.3.1.1.2., C5.10.1.1.2., C6.2.2.2., C6.2.2.2.2., C9.2.1.2.3., C9.2.2.2.6., AP1.1.22., AP1.1.23., AP1.1.100.

deliver, C1.1.2., C2.1.1.1.3., C2.4.2.1., C3.2.1.2.1.1., C3.7.1.3., C4.2.1.4., C4.3.1.2.4., C5.1.1.2., C5.5.1.4., C8.8.1.5., AP1.1.149., AP1.1.153., AP8.1.1.

demand, C1.4.1.2.1., C2.1.1.1., C2.1.1.1.1., C2.1.1.1.2., C2.1.1.1.3., C2.1.1.2., C2.1.1.2.3., C2.1.2.1., C2.1.2.2., C2.1.2.4., C2.1.2.5., C2.2.1.2., C2.2.1.3., C2.2.2.4.2., C2.3.1.3., C2.3.2.1.2., C2.4.2.2.2., C2.5.1.1., C2.5.1.2., C2.5.1.2.1., C2.5.1.2.2., C2.5.1.3.1., C2.5.1.3.3., C2.5.1.3.3.2., C2.5.1.4., C2.5.1.6., C2.5.2.1., C2.5.2.1.3., C2.5.2.2., C2.5.2.3., C2.5.2.4.1., C2.6.1.1.2., C2.6.1.1.4., C2.6.1.2.3.4., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.2.1., C2.6.2.2.4.2., C2.6.2.2.4.3., C2.6.2.2.5.2., C2.6.2.2.7.1., C2.6.3.1., C2.6.3.1.1., C2.6.3.1.3., C2.6.3.1.4., C2.6.3.1.5.1., C2.6.3.1.6., C2.6.3.2.,

C2.6.3.2.1., C2.6.3.2.2.2., C2.6.3.2.2.3., C2.6.3.2.2.4., C2.6.3.2.3., C2.6.3.2.4.,
 C2.6.3.2.4.1., C2.6.3.2.4.3.2., C2.6.4.3.5., C2.6.3.2.6.1., C2.6.4.1., C2.6.4.1.1.,
 C2.6.4.2., C2.6.4.2.1., C2.6.4.2.2., C2.6.4.2.2.1., C2.6.4.2.2.2., C2.6.4.2.3., C2.6.5.1.1.,
 C2.6.5.1.1.1., C2.6.5.1.1.2., C2.6.5.1.2., C2.6.5.1.3. C2.6.5.2.1.1., C2.6.5.2.1.2.,
 C2.6.5.2.3., C2.6.5.2.4., C2.6.5.2.4.1., C2.6.5.2.4.2., C2.8.1.1.1.2., C2.8.1.2.1.,
 C2.8.1.2.2., C2.8.1.2.3.1., C2.8.1.2.4.2., C2.8.1.2.5., C2.8.2.1., C3.1.1.3., C3.2.1.1.4.,
 C3.2.2.1.2.1., C3.2.2.1.2.8., C3.2.5.2.1.3., C3.2.5.2.1.4., C3.2.5.2.1.5., C3.2.5.2.1.8.,
 C3.2.5.2.2., C3.2.5.2.4., C3.2.5.2.5., C3.2.5.2.6., C3.2.6.1.1.2., C3.2.6.1.1.3.,
 C3.2.6.1.2., C3.2.6.2.1., C3.6.3.4.6., C3.6.2.4.14., C3.6.2.4.15., C4.1.1.1.1., C4.2.1.3.,
 C4.2.2.1.1.1., C4.2.2.1.2., C4.3.1.1., C4.3.2.1., C4.4.2.2., C4.5.1.1., C5.2.2.1.2.2.,
 C5.2.2.1.4., C5.2.2.2.1., C5.3.1.1.5., C5.3.1.1.5.2., C5.3.1.1.5.3., C5.3.1.1.5.4.,
 C5.3.1.4.5., C5.4.1.2.3., C5.8.2.3., C6.1.1.3., C6.1.2.2.5., C6.3.1.3., C7.3.1.2.1.,
 C8.2.2.2.5., C8.2.2.2.5.2., C8.8.1.1., C9.3.2.1.1.2., AP1.1.11.6., AP1.1.18., AP1.1.20.,
 AP1.1.26., AP1.1.27., AP1.1.27.1., AP1.1.27.2., AP1.1.28., AP1.1.53., AP1.1.56.,
 AP1.1.69., AP1.1.70., AP1.1.90., AP1.1.119.1., AP1.1.119.2., AP1.1.136., AP1.1.145.,
 AP2.2.1.4., AP2.2.1.4.1., AP2.2.1.4.2., AP2.2.2., AP2.2.2.1., AP2.2.2.2., AP2.2.2.3.,
 AP2.2.2.4., AP2.2.3.1., AP2.2.3.4., AP2.2.3.5., AP3.1.3.1., AP3.1.3.2., AP3.1.3.3.,
 AP3.1.3.4., AP3.1.3.5., AP3.1.3.6., AP6.3.5.6., AP7.4.4., AP8.1.1.2.

demand-based item, C2.6.2.2.5.2., C2.6.3.1.1., C2.6.4.1.1., C2.6.4.2.1.,
 C2.6.5.1.1.2., C2.8.2.1., AP1.1.70.

nonrecurring demand, C3.2.5.2.6.

recurring demand, C2.5.2.2., C2.5.2.4.1., C3.2.5.2.1.5., C5.3.1.1.5., C5.3.1.1.5.1.,
 C5.3.1.1.5.2., C5.3.1.1.5.3., C5.3.2.2.,

demand development period (DDP), C2.5.1.3.3., C2.6.5.2.4.1., 46, C3.2.6.1.1.3.,
 AP2.2.1.4., AP2.2.1.4.2., AP2.2.1.7., AP2.2.3.1., AP2.2.3.2., AP2.2.3.3., AP2.2.3.4.,
 AP2.2.3.5., AP2.2.3.6., AP13.1.1., AP13.1.2.

demand pattern, C5.2.2.1.2.2., C5.2.2.1.4.

demand-based, C2.2.1.2., C2.3.1.3., C2.6.2.1.1., C2.6.2.1.2., C2.6.3.2.1., C2.6.3.2.3.,
 C2.6.5.2.3., C3.2.5.2.6., AP1.1.27., AP1.1.27.1., AP3.1.3.2.

demand-based item, C2.6.2.2.5.2., C2.6.3.1.1., C2.6.4.1.1., C2.6.4.2.1., C2.6.5.1.1.2.,
 C2.8.2.1., AP1.1.70.

demilitarization, C5.10.1.3., C5.10.1.4., C5.10.2.1., C5.10.2.3., C6.2.2.2.2.3.,
 C9.3.1.1.2., C9.3.3.1.3., C9.3.5.1., AP1.1.29.

depot level reparable, C2.3.1.1., C2.6.1.2.3., C2.6.1.2.3.4., C4.1.1.2., C5.7.3.2.4.2.,

C6.3.1.2., C8.1.2.1., AP6.1.1., AP6.1.2., AP6.3.4.1., AP6.3.4.2., AP6.3.5.1.2., AP6.3.5.2., AP6.3.5.3.

diminishing manufacturing sources and material shortages (DMSMS), C3.6., C3.6.1.1., C3.6.1.2., C3.6.1.3., C3.6.1.4., C3.6.2.1., C3.6.2.2., C3.6.2.2.1., C3.6.2.2.2., C3.6.2.2.2.2., C3.6.2.2.3., C3.6.2.2.4., C3.6.2.2.5., C3.6.2.2.5.2., C3.6.2.3., C3.6.2.4., C3.6.2.4.4., C3.6.2.4.10., C3.6.2.4.12., C3.6.2.4.13., C3.6.2.4.14., C3.6.2.5., C3.6.2.6., C3.6.2.7.

direct vendor delivery, C2.6.5.1.1., C4.4.2.2.

disposal, C1.3.1.3., 33, C2.8.1.1., C2.8.1.1.2., C2.8.1.1.4., C2.8.1.2.1., C3.2.5.2.1.2., C3.7.1.1., C4.5.1.2., C4.5.2.1., C5.1.1.1., C5.1.1.2.5., C5.6.1.8., C5.6.1.9., C5.7.7.1.3.2., C5.7.7.21.3.10., C5.8.2.4., C5.8.2.9., C5.9.1.3., C5.9.2.7., C5.10.1.1., C5.10.1.2., C5.10.2.1., C5.10.2.2., C6.1.2.2.8., C6.1.2.2.9., C6.1.2.2.10., C6.2.2.2.2., C6.2.2.2.2.1., C6.2.2.2.2.3., C6.4.2.2., C8.1.1.2.2.4., C8.2.2.2.5.3., C8.5.1.1., C8.5.2.9., C8.5.2.11.13., C8.5.2.12.2., C9.2.2.2.6., C9.3.1.1.2., C9.3.1.2.2., C9.3.2.1.1.2., C9.3.2.1.1.4.3., C9.3.3.1.3., C9.3.5.1., AP1.1.23., AP1.1.51., AP1.1.58., AP1.1.63., AP1.1.68., AP1.1.73., AP1.1.100., AP1.1.138., AP1.1.143., AP1.1.157., AP5.4.2.2.1.

DoD Activity Address Code (DoDAAC), C5.3.1.1.1., C5.3.2.1., AP1.1.127., AP13.2.2.4.

DoD Small Arms Serialization Program (DoDSASP), 80, C5.7.3.2.4.1., C5.7.4., C5.7.4.1., C5.7.4.2.2., C5.7.5.2.3., C5.7.4.2.4., C5.7.4.4.4., C5.7.4.5.1., C5.7.4.5.3., C5.7.4.6., AP11.3.1., AP11.4.2.4.

donation, C5.10.1.2., C5.10.1.5.6., C5.10.2.1., C8.5.2.12.6., C9.3.1.2.2., AP1.1.31., AP1.1.40.

E

economic order quantity (EOQ), C2.6.3.1.2., C2.6.3.2.1., C2.6.3.2.2., C2.6.3.2.2.2., 62, C2.6.3.2.2.3., C2.6.4.1.2., C2.6.4.2.2., C4.3.2.3., AP1.1.32., AP1.1.126.

economic retention munitions stock (ERMS), C9.3.2.1.1.2., C9.3.2.1.1.4., C9.3.2.2.1.1., C9.3.2.2.1.2.1., C9.3.2.2.2.2., C9.3.3.2.2., C9.3.5.1.

economic retention stock (ERS), C2.8.1.1.1., C2.8.1.1.1.2., C2.8.1.1.1.3., C2.8.1.1.3., C2.8.1.2.1.,

electronic communication, C4.4.1.1.1., C5.4.1.1., C5.8.2.6., C8.6.1.1.5., C8.7.2.16.

electronic data interchange (EDI), C3.8.1.1., C8.6.1.1.2.

end item, C1.5.1.1., C2.2.1.1.1.1., 10, C2.2.1.1.1.2., C2.2.1.1.2., C2.2.1.2., C2.2.1.3., C2.2.1.3.1., C2.2.1.3.2., C2.2.2.1.1., C2.2.2.1.1.2., C2.2.2.5.1.1., C2.2.2.5.1.2., C2.3.2.1.1., C2.3.2.4., C2.4.2.5., C2.5.2.1.2., C2.6.1.2.3.1.1., C2.6.2.2.9., C2.6.3.2.2.3., C2.6.4.2.2.2., C2.6.5.1.4., C2.8.1.2.1., C3.2.1.1.2., C3.2.1.2.1.3., C3.6.2.4.8., C3.6.2.4.12., C5.9.2.5., C6.3.2.1.1.6., C8.1.1.2.2.2., C8.1.1.2.2.3., C8.2.2.2.2.2., C8.4.2.6.2., C8.4.2.6.5., C8.8.1.1.1., C9.2.2.2.1., AP1.1.7., AP1.1.11.7., AP1.1.14., AP1.1.38., AP1.1.47., AP1.1.64., AP1.1.65., AP1.1.84., AP1.1.105., AP1.1.112., AP1.1.137., AP2.2.1.2., AP2.2.1.4., AP2.2.2., AP2.2.3.6., AP3.1.3.5., AP4.1., AP4.2., AP4.3., AP4.3.1., AP4.3.3., AP4.3.4., AP4.4., AP4.4.1., AP4.4.2., AP4.4.4., AP4.4.5., AP4.5.

end-user, C8.7.1.5., 139, C9.2.2.1.1.2.1., C9.2.2.2.2., AP1.1.146., AP1.1.160.

engineering, C1.2.1., C2.5.1.2.2., C2.5.1.3.3., C2.5.1.3.3.2., C2.6.3.2.5.2., C3.3.1.3.1., C3.3.2.1.1., C3.3.2.6., C3.4.1.4.3., C3.6.2.4.5., C4.1.2.4., C5.7.3.1., C5.7.7.2.3.5., C8.2.2.1.2., C8.5.2.11.9., C8.5.2.11.11., C8.5.2.12.3., C8.7.2.12., AP1.1.36., AP1.1.64., AP1.1.69., AP2.1.2., AP2.2.1.4., AP2.2.3.1., AP2.2.3.2., AP2.2.3.5., AP5.1.2., AP15.A1.6.2.

enterprise resource planning (ERP), C1.4.2.7., C7.1.2.6.

essential item, C2.6.2.1.1., C2.6.2.1.2., AP1.1.56., AP3.1.3.4.

excess, C1.4.1.2.5., C2.6.3.2.2.2.1., C3.6.2.4.10., C4.5.1.2., C4.5.2.1., C5.1.1.2.1., C5.3.1.4.3., C5.10.1.5.4., C5.10.1.5.6., C6.1.1.4., C9.3.1.1.2., C9.3.2.1.1.4., C9.3.3.1.3., C9.5.2.1.1.2., C9.5.2.1.4.3., C9.5.2.1.4.8., AP1.1.23., AP1.1.29., AP1.1.40., AP1.1.118.

exchange, C2.3.2.2., C2.5.1.4., C3.1.1.2.3., C4.2.1.3., C5.7.3.2.7.2., C5.7.3.2.8.3., C5.10.1.5.5., C7.1.2.2., C7.1.2.3., C7.4.2.3., C8.1.1.1., C8.5.2.11.13., C8.6.1.1.5., C9.2.1.1., C9.5.1.1., C9.5.2.1.1., C9.5.2.1.1.3.1., C9.5.2.1.1.3.2., C9.5.2.1.2., C9.5.2.1.4.3., C9.5.2.1.4.4., C9.5.2.1.4.5., C9.5.2.1.4.6., C9.5.2.1.4.7., C9.5.2.1.4.8., C9.5.2.2., AP2.1.5., AP10.3.6., AP15.3.1.

F

Federal Logistics Information System (FLIS), C8.1.1.2., C8.1.1.2.1., C8.1.1.2.2.1., C8.1.1.2.2.2., C8.1.1.2.2.3., C8.1.1.2.2.4., C8.1.1.2.2.5., C8.1.1.5., C8.1.1.5.1., C8.1.1.5.2., C8.1.1.5.3., C8.1.2.1., C8.1.2.2., C8.4.2.4., C8.5.2.1., C8.5.2.2., AP1.1.41., AP1.1.88., AP1.1.156.

federal supply classification (FSC), C3.4.2.2., AP1.1.42., AP1.1.89., AP1.1.102., AP7.4.1., AP7.A1.

field level reparable, C2.3.1.1., C6.3.1.2., C6.3.2.3., C8.1.2.1., AP6.1.1.

flight safety critical aircraft part (FSCAP), C8.5., 121, C8.5.1.3., C8.5.2.2., C8.5.2.3., C8.5.2.4., C8.5.2.5., C8.5.2.9., C8.5.2.10., C8.5.2.11.1., C8.5.2.11.2., C8.5.2.11.3., C8.5.2.11.4., C8.5.2.11.5., C8.5.2.11.6., C8.5.2.11.7., C8.5.2.11.9., C8.5.2.11.10., C8.5.2.11.11., C8.5.2.11.12., C8.5.2.11.13., C8.5.2.11.15., C8.5.2.12.1., C8.5.2.12.2., C8.5.2.12.3., C8.5.2.12.5., C8.5.2.12.6., C8.5.2.12.6.1., C8.5.2.12.6.2., C8.5.2.12.6.3., C8.5.2.12.6.4., AP1.1.7., AP1.1.7.1.

foreign military sales (FMS), C2.5.2.2., C5.7.4.2.5., AP1.1.44., AP9.1.3.1., AP14.1.2.2.2.

functional data administrator (FDAd), C8.6.2.1.1.5., C8.6.2.2.1., , C8.6.2.2.2, C8.6.2.2.2.3.

G

Government furnished material (GFM), C3.6.2.4.8., C3.6.2.4.14., C3.7.2.3., C3.7.2.4.2., C5.10.1.5.3., C5.11.2.4., AP1.1.47., AP1.1.75.

H

hazardous item, C2.2.2.1.2., C5.2.2.1.2.1.

I

inactive item, C2.9.2.3., AP7.4.4.

initial spares, C2.2.1.1., C2.2.2.5.4., AP2.2.3.6.

insurance item, C2.6.5.1.2., C3.2.5.2.1.5., AP2.2.2.4.

integrated materiel manager (IMM), C1.2.1., C2.1.2.3.1., C2.1.2.3.1.1., C2.1.2.3.2., C2.2.2.2.2., C2.3.2.6., C2.5.2.2., C2.5.2.4., C2.5.2.4.1., C2.6.1.2.3.3., C2.6.1.2.3.4., C2.6.1.2.3.4.2.1., C2.6.3.2., C2.6.3.2.4.1., C2.6.3.2.4.3.2., C2.6.3.2.4.4., C2.6.3.2.4.5., C2.8.1.1.1.3., C2.8.1.1.3., C2.8.1.1.4., C2.8.1.2.5., C2.9.1.4., C3.2.4.1.4., C3.3.2.1.2., C3.3.2.6.1., C3.4.1.1., C3.6.2.5., C3.7.1.1., C3.7.1.3., C3.7.2.1., C3.7.2.2., C4.4.1.1.3., C5.3.1.4.2.1., C5.4.1.4., C5.5.1.2., C5.5.1.3., C5.5.2.1., C5.5.2.1.1., C5.5.2.3., C5.6.1.9., C5.7.1.1.2.2., C5.7.1.1.4.3., C5.7.6.1.3., C5.10.1.1.1., C6.1.1.3., C6.1.1.5., C6.1.2.2.3., C6.1.2.2.8., C6.1.2.2.9., C6.1.2.2.10., C6.3.1.2., C6.3.2.1., C6.3.2.5., C6.2.2., C8.3.1.2., C8.4.2.2., C8.8.1.3., C8.8.2.2., C9.1.1.3., C9.1.1.5., C9.2.2.1.2.3., AP1.1.53., AP1.1.58., AP1.1.64., AP1.1.78., AP1.1.148., AP1.1.155., AP1.1.165., AP2.2.1.6., AP2.2.1.7.

interchangeability, C8.1.1.1., AP1.1.144., AP2.1.1.4.

interchangeable and substitutable (I&S), C2.9.1.2., C2.9.1.2.2., C2.9.1.4., C2.9.1.5., C2.9.2.2., C8.4.2.6.1.1., AP1.1.59.

interim contractor support (ICS), AP2.2.3.2.

intransit, C1.3.2.1.2., C3.8.1.3.3., C4.4.2.2., C5.1.1.2.3., C5.7.5.2.7.10., C5.8.1.1., C5.8.1.2., C5.8.2.1., C5.8.2.3., C5.8.2.7., C6.1.1.2., C9.2.2.1.2.3., AP8.1.4.3., AP8.2.1.5.

inventory, 2, C1.3.1.2., C1.3.1.5., C2.1.1.1.1., C2.1.1.1.2., C2.2.1.2., C2.4.2.2., C2.4.2.2.1., C2.4.2.2.2., C2.5.1.1., C2.5.2.4.3., C2.6.1.1.1., C2.6.1.2.3.4.1., C2.6.1.2.3.4.2., C2.6.3.1., C2.6.3.1.5.3., C2.6.3.2.2.2.1., C2.6.3.2.4.5., C2.6.4.1.2., C2.6.4.2.4.6., C2.6.5.1.1.1., C2.8.1.1., C2.8.1.1.2., C3.2.2.1.1., C3.2.3.1.5., C3.2.3.1.6., C3.2.5.2.1.2., C3.2.5.2.1.7., C3.2.6.1.1., C3.2.6.1.1.2., C3.2.6.1.1.3., C3.2.6.2.1., C3.2.6.2.2., C3.6.2.4.6., C3.6.2.4.14., C3.7.2.3., C3.7.2.4., C3.8.1.3.1., C4.2.2.1., C4.3.2.1., C5.2.1.1.1., C5.2.2.1.2.1., C5.2.3.1.1., C5.3.1.1.2., C5.3.1.4.2.1., C5.3.1.4.4., C5.3.2.4., C5.6.1.6., C5.7.1.1.1., C5.7.1.1.2., C5.7.3.1., C5.7.4.2.5., C5.7.5.1.4., C5.7.5.1.4.5., C5.7.5.2.1., C5.7.5.2.1.1., C5.7.5.2.3.1.3., C5.7.5.2.3.1.4., C5.7.5.2.3.2.4., C5.7.5.2.3.3.4., C5.7.5.2.3.4., C5.7.5.2.4., C5.7.5.2.6., C5.7.5.2.7.1., C5.7.5.2.7.2., C5.7.5.2.7.3., C5.7.5.2.7.5., C5.7.5.2.7.6., C5.7.5.2.7.7., C5.7.5.2.7.8., C5.7.5.2.8.1., C5.7.5.2.8.4., C5.7.5.2.9.1., C5.7.5.2.10., C6.1.1.1., C8.2.2.2.2., C8.2.2.2.5., C8.2.2.2.5.3., C8.5.2.2., C9.1.1.2., C9.1.2.3., C9.2.1.1., C9.2.1.2.1., C9.2.1.2.3., C9.2.2.1.1.1., C9.2.2.1.1.2., C9.2.2.1.2., C9.2.2.1.2.1., C9.2.2.1.2.2., C9.2.2.1.2.3., C9.2.2.2.2., C9.2.2.2.4., C9.2.2.2.5., C9.2.2.3.2., C9.3.1.1.1., C9.3.1.1.2., C9.3.1.2.2., C9.3.2.1.1., C9.3.2.1.1.1., C9.3.2.1.1.2., C9.3.2.1.1.3., C9.3.2.1.1.4., C9.3.2.2.1.1.2., C9.3.2.2.2.2., C9.3.2.2.3., C9.3.3.1.3., C9.3.6.1.1., C9.3.6.1.2., C9.3.6.2.1., C9.3.6.2.2., AP1.1.15., AP1.1.17., AP1.1.29., AP1.1.32., AP1.1.33., AP1.1.61., AP1.1.62., AP1.1.73., AP1.1.80., AP1.1.94., AP1.1.111., AP1.1.116., AP1.1.119., AP1.1.121., AP1.1.122., AP1.1.131., AP1.1.132., AP1.1.158., AP1.1.150., AP1.1.161., AP1.1.165., AP3.1.1., AP3.1.4., AP5.2.1., AP5.2.2., AP5.4.1., AP5.4.2., AP5.4.2.1., AP5.4.2.3., AP5.4.2.4., AP6.3.4.2., AP12.1., AP12.2.2., AP12.3.1.

inventory control point (ICP), C2.4.2.2., C2.4.2.2.2., C2.9.2.6., C3.2.6.2.2., C3.6.2.6., C5.2.2.2.3., C5.2.2.2.4., C5.4.2.2., C5.5.2.3., C5.7.7.1.3.2., C8.5.2.2., C8.5.2.3., C8.8.1.5., C9.1.1.2., AP1.1.20., AP1.1.29., AP1.1.30., AP1.1.64., AP1.1.80., AP1.1.128., AP1.1.162., AP6.3.4.2., AP6.3.4.4.1., AP6.3.4.4.2., AP6.3.5.2.1.1., AP6.3.5.3., AP6.3.5.3.2.1., AP6.3.5.3.2.2., AP8.T1., AP8.T2., AP8.T3.

item property record, C3.8.1.1., C5.4.1.1., C5.7.1.1.2.2., C5.7.1.1.3., C5.7.1.1.4., C5.7.1.1.4.2., C5.7.1.1.4.3., C5.7.2.1., C5.7.6.1.2.3., AP1.1.155.

J

Joint Physical Inventory Working Group (JPIWG), C5.7.5.2.7.9., C5.7.5.2.9.2., C5.7.5.2.10, AP12., AP12.1., AP12.2.1., AP12.2.2., AP12.3., AP12.3.2., AP12.3.3., AP12.4.1., AP12.4.1.1., AP12.4.1.2., AP12.4.1.3., AP12.4.1.5., AP12.4.1.6., AP12.4.1.7., AP12.4.2., AP12.4.2.1., AP12.4.2.2., AP12.4.2.3., AP12.4.2.4., AP12.5.,

Joint Small Arms Coordinating Group (JSACG), C5.7.4.2.1., C5.7.4.2.2., C5.7.4.2.4., C5.7.4.3.1., C5.7.4.3.2., C5.7.4.3.3., C5.7.4.4.4., C5.7.4.5.1., C5.7.4.5.4., C5.7.4.7., C5.7.4.8., AP10.3.4., AP11., , AP11.1., AP11.2.1., AP11.2.2., AP11.2.3., AP11.3., AP11.3.6., AP11.4.1., AP11.4.1.1., AP11.4.1.2., AP11.4.1.3., AP11.4.1.5., AP11.4.1.7., AP11.4.1.8., AP11.4.1.9., AP11.4.1.10., AP11.4.2.1., AP11.4.2.2., AP11.4.2.3., AP11.4.2.4., AP11.5.

K

L

life cycle, C1.2.3.1., C1.3.1.1., C1.3.1.3., C1.3.2.9., C1.4.1.2.2., C1.4.2.7., C2.2.2.4.1.2., C2.4.2.2.1., C2.4.2.5., C3.1.1.1., C3.3.1.1.2., C3.3.1.2.1., C3.6.1.2., C6.3.2.1.1.6., C8.5.1.1., C8.5.2.6., C8.5.2.11.10., C8.5.2.12.1., C8.7.2.2., C8.7.2.8., AP1.1.7.1., AP1.1.157.

life-of-type (LOT), C2.6.5.1.4., C3.2.5.2.1.7., C3.2.5.2.6., C3.6.2.4.8., AP1.1.69., AP1.1.90.

limited demand, C2.3.1.3., C2.6.1.1.2., C2.6.2.1.1., C2.6.5.1.1., C2.6.5.1.1.1., C2.6.5.2.1.1., C2.6.5.2.1.2., C2.6.5.2.4., C3.2.5.2.1.3., C3.2.5.2.1.4., C3.2.5.2.5., AP1.1.27., AP1.1.27.2., AP1.1.70., AP2.2.2.4., AP3.1.3.3.

loan, C5.7.1.1.2.2., C5.7.5.3.7.10., C5.10.1.5.5., C9.2.2.1.2.3., AP1.1.155.

local purchase, C3.2.4.1.1., C3.2.4.1.2., C3.2.4.2.1., C3.2.4.2.3.

Logistics Metric Analysis Reporting System (LMARS), C7.3.2.1.1., C8.8.2.4., AP13.1.5.1.5.,

logistics support, C2.2.2.3.1.1., C2.2.2.3.1.2., C3.2.2.1.2.6., C3.3.1.2.1., C3.6.1.1., C3.6.2.2.2.1., C3.6.2.7., C4.1.1.1.1., C5.1.1.3., C5.11.1.2.2., C9.4.1.1., C9.4.1.2., C9.4.2.2., AP9.1.2.1.3.6.7., AP13.1.7.

logistics support planning, C5.11.1.2.2.

M

maintenance, C1.2.1., C1.3.1.3., C1.4.1.2.5., C2.1.1.1., C2.2.2.3.1.1., C2.3.2.1.1., C2.5.2.1.1., C2.5.2.1.2., C2.6.1.1.4., C2.6.2.2.2.2., C2.6.2.2.4.1., C2.6.3.1.5.2., C2.6.3.1.5.3., C2.6.3.1.7., C2.6.3.2.5.1., C2.6.3.2.5.2., C2.6.4.1.4., C2.6.4.1.5., C2.6.4.1.6., C2.6.4.2.2., C2.6.4.2.2.1., C2.6.4.2.4., C2.6.4.2.4.1., C2.6.4.2.4.2., C2.6.4.2.4.4., C3.1.1.1., C3.1.2.2., C3.2.1.1.4., C3.3.2.6.3., C4.1.1.2., C4.1.1.2.2., C4.1.2.1., C4.2.1.1., C4.2.1.3., C4.2.1.4., C4.2.2.1., C4.2.2.1.1., C4.2.2.1.1.1., C4.2.2.1.1.2., C4.2.2.1.2., C4.2.2.3., C4.4.2.1., C5.2.2.1.2.1., C5.3.1.1.5.2., C5.5.2.1.1.1., C5.6.1.1., C5.7.3.1., C5.7.4.2.3., C5.7.4.4.2., C5.7.5.2.7.10., C5.11.1.2.2., C6.1.1.5., C6.1.2.2.3., C6.3., C6.3.1.1., C6.3.1.2., C6.3.1.4., C6.3.2.1., C6.3.2.1.1.2., C6.3.2.1.1.5., C6.3.2.2., C6.3.2.3., C6.3.2.4., C7.3.1.4.3., C7.3.2.1.1., C7.4.2.2.3., C7.4.2.2.4., C8.1.1.4.2., C8.2.2.4.1., C8.5.1.3., C8.5.2.7.6., C8.5.2.9., C8.5.2.11.15., C8.5.2.12.6.1., C8.5.2.12.6.2., C8.6.1.1., C8.6.2.2.2.12., C8.7.2.14., C8.8.1.6., C9.1.1.5., C9.1.2.2.2., C9.2.2.1.2., C9.2.2.2.2., AP1.1.7., AP1.1.7.1., AP1.1.10., AP1.1.11.9., AP1.1.13., AP1.1.43., AP1.1.73., AP1.1.74., AP1.1.84., AP1.1.120., AP2.2.1.1., AP6.1.1., AP6.1.2., AP6.2.1., AP6.2.2., AP6.2.2.3., AP6.3., AP6.3.4.1., AP6.3.4.3.2., AP6.3.4.4.2., AP6.3.5., AP6.3.5.1., AP6.3.5.1.1., AP6.3.5.1.2., AP6.3.5.2., AP6.3.5.2.1.2., AP6.3.5.2.1.3., AP6.3.5.2.2.1., AP6.3.5.2.2.2., AP6.3.5.3., AP6.3.5.3.1.1., AP6.3.5.3.2.2., AP9.1.2.1.3.5.10., AP9.1.2.1.3.6.7., AP13.1.1.1., AP13.1.2.2.4., AP13.1.4.

marking, C5.7.3.2.3., C5.7.6.1.4., C6.1.2.2.8., C6.4.2.2., C8.7.1.5., C8.7.1.8., C8.7.2.2., C8.7.2.13., C8.7.2.14., C8.7.2.17.

matériel, C1.1.1., C1.1.2., C1.1.3., C1.2.1., C1.2.2., C1.3., C1.3.1.1., C1.3.1.3., C1.3.1.4., C1.3.1.5., C1.3.2.4., C1.3.2.5., C1.3.2.9., C1.4.1.1., C1.4.1.2.2., C1.4.1.2.3., C1.4.1.2.5., C1.4.2.6., C1.5.1.1., C1.5.2.2.2., C2.1.1.1.2., C2.2.1.1.1.1., C2.2.1.1.3., C2.2.2.1.2., C2.2.2.1.3., C2.2.2.5.4., C2.3.1.2.1., C2.4.2.1., C2.4.2.2., C2.4.2.3., C2.5.1.4., C2.6.1.2.3.4., C2.6.2.2.2.2., C2.6.3.1.2., C2.6.3.1.4.1., C2.6.3.2.4.3.2., C2.6.4.2.4.6., C2.7.1.1., C2.7.1.2., C2.7.1.3., C2.7.2.1., C2.7.2.3.1., C2.8.1.1.4., C3.1.1.1., C3.1.1.2.3., C3.1.1.2.4., C3.1.1.3., C3.1.2.1., C3.2.1.1.1., C3.2.1.1.2., C3.2.1.1.3., C3.2.1.1.4., C3.2.1.2.1., C3.2.1.2.1.1., C3.2.2.1.1., C3.2.2.1.2., C3.2.2.1.2.3., C3.2.3.1.2., C3.2.3.1.3., C3.2.4.1.1., C3.2.4.2.2., C3.2.5.1.3., C3.2.5.2.1., C3.2.5.2.1.2., C3.2.6.1.1.1., C3.3.1.1., C3.3.1.1.1., C3.3.1.1.1.1., C3.3.1.1.3., C3.3.1.3.2., C3.3.2.1.4., C3.4.1.3., C3.4.2.2., C3.5.2.9.2., C3.7.1.1., C3.7.2.1., C3.8.1.1., C3.8.1.3.1., C3.8.1.3.2., C3.8.1.3.3., C3.8.1.5.1., C3.8.1.5.2., C3.8.1.6.1., C3.8.1.6.2., C4.1.1., C4.1.1.1., C4.1.1.2., C4.1.2.1., C4.1.2.4., C4.2.1.2., C4.2.1.3., C4.2.2.1., C4.2.2.1.1., C4.2.2.1.2., C4.2.2.3., C4.4.1.1.3., C5.1.1.1., C5.1.1.2.5., C5.1.2.3., C5.2.2.2.2., C5.2.2.2.5., C5.3.1.1.1., C5.3.1.1.5.1., C5.3.1.1.5.2., C5.3.1.1.5.4., C5.3.1.3., C5.3.1.4.1., C5.3.1.4.3., C5.3.1.4.4., C5.3.1.4.5., C5.3.1.4.7., C5.3.1.5., C5.3.1.5.1., C5.3.1.6., C5.3.2.3., C5.4.1.1., C5.4.1.3., C5.4.1.4., C5.4.2.1., C5.5.1.1., C5.5.2.2., C5.5.2.3., C5.6.1.1., C5.6.1.4., C5.6.1.5., C5.6.1.5.2., C5.6.1.5.5., C5.6.1.7., C5.7.1.1.1., C5.7.1.1.2.2., C5.7.1.1.4., C5.7.1.1.4.1., C5.7.1.1.4.3., C5.7.4.2.5.,

C5.7.5.1.1., C5.7.5.1.3., C5.7.5.1.4.4., C5.7.5.2.3.4., C5.7.5.2.6., C5.7.5.2.7.3.,
 C5.7.5.2.7.5., C5.7.5.2.7.10., C5.7.5.2.9.1., C5.7.5.2.10., C5.7.6.1.1., C5.7.6.1.2.3.,
 C5.7.6.1.2.4., C5.7.7.1.3.2., C5.7.8.1.1., C5.7.8.2.2., C5.8.2.4., C5.8.2.7., C5.8.2.11.,
 C5.9.2.8., C5.10.1.1., C5.10.1.2., C5.10.1.4., C5.10.1.5., C5.10.1.5.5., C5.10.2.2.,
 C5.11.1.1., C5.11.1.2.1., C5.11.1.2.2., C5.11.2.1., C5.11.2.1.1., C5.11.2.1.3.,
 C5.11.2.1.6., C5.11.2.2., C5.11.2.3.1., C5.11.2.3.2., C5.11.2.4., C5.11.2.7., C6.1.1.1.,
 C6.1.1.2., C6.1.1.3., C6.1.1.4., C6.1.1.5., C6.1.2.1., C6.1.2.2., C6.1.2.2.3., C6.1.2.2.6.,
 C6.1.2.2.8., C6.1.2.2.9., C6.2.1.1., C6.2.1.3., C6.2.2.1., C6.2.2.2., C6.2.2.2.2.,
 C6.2.2.2.2.2., C6.2.2.2.2.3., C6.2.2.3., C6.3., C6.3.2.1., C6.4.2.2., C7.1.1.1.1., C7.1.1.3.,
 C7.1.2.8., C7.1.2.9., C7.2.1.2.1.1., C7.3.1.2.1., C7.3.1.2.2., C7.3.1.2.4., C7.3.1.4.1.,
 C7.3.2.1.1., C8.4.1.1., C8.5.2.11.12., C8.7.1.1., C8.7.1.5., C8.7.1.8., C8.7.1.10.,
 C8.7.2.1., C8.7.2.2., C8.7.2.3., C8.7.2.15., C8.7.2.19., C8.8.1.1., C8.8.1.1.2.,
 C8.8.1.1.2.1., C8.8.1.2., C8.8.1.5., C8.8.2.1.1., C8.8.2.2., C9.1.1.1., C9.1.2.2., C9.2.1.1.,
 C9.2.2.1.1.2.1., C9.2.2.1.2.1., C9.2.2.1.2.3., C9.2.2.2., C9.2.2.2.2., C9.2.2.2.6.,
 C9.2.2.2.7., C9.2.2.3.2., C9.3.2.1.1.3., C9.3.6.2.2., C9.5.2.1.4.4., C9.5.2.1.4.5.,
 C9.5.2.1.4.7., AP1.1.2., AP1.1.6., AP1.1.8., AP1.1.10., AP1.1.11., AP1.1.11.8.,
 AP1.1.20., AP1.1.23., AP1.1.25., AP1.1.37., AP1.1.47., AP1.1.48., AP1.1.49.,
 AP1.1.58., AP1.1.62., AP1.1.64., AP1.1.71., AP1.1.73., AP1.1.77., AP1.1.78.,
 AP1.1.79., AP1.1.80., AP1.1.83., AP1.1.92., AP1.1.93., AP1.1.94., AP1.1.100.,
 AP1.1.101., AP1.1.104., AP1.1.106., AP1.1.108., AP1.1.111., AP1.1.112., AP1.1.117.,
 AP1.1.127., AP1.1.129., AP1.1.130., AP1.1.130., AP1.1.135., AP1.1.136., AP1.1.142.,
 AP1.1.143., AP1.1.146., AP1.1.147., AP1.1.148., AP1.1.151., AP1.1.152., AP1.1.153.,
 AP1.1.155., AP1.1.159., AP1.1.160., AP2.1.3., AP2.1.5., AP2.2.3.2., AP2.2.3.5.,
 AP3.1.3.7., AP3.1.4., AP5.3.1., AP5.3.2., AP5.3.3., AP5.4.2.4.1., AP5.4.2.4.2.,
 AP6.3.5.3., AP7.1., AP8.1.1., AP8.1.1.2., AP8.3.1., AP9.1.1.3., AP9.1.2.5., AP9.1.3.1.,
 AP12.1., AP12.3.1., AP16.T2.

materiel control activity (MCA), C5.11.2.1., C5.11.2.1.6., C5.11.2.2., C5.11.2.4.,
 C5.11.2.6.1., AP1.1.75.

materiel manager, C1.1.1., C1.2.1., C1.4.1.2.3., C2.2.1.1.1.1., C2.2.1.1.3., C2.2.2.1.2.,
 C2.2.2.1.3., C2.2.2.5.4., C2.3.1.2.1., C2.4.2.3., C2.5.1.4., C3.1.1.2.3., C3.2.1.1.4.,
 C3.3.1.1., C3.3.1.1.1., C3.3.1.3.2., C3.3.2.1.4., C4.1.1.2., C4.1.2.1., C4.2.1.2., C4.2.1.3.,
 C4.2.2.1., C4.2.2.1.1., C4.2.2.1.2., C5.7.5.1.4.4., C5.9.2.8., C8.8.1.2., C8.8.2.1.1.,
 AP2.1.3., AP2.1.5., AP2.2.3.2., AP2.2.3.5., AP8.1.1.2.

materiel release order (MRO), C5.3.1.3., C5.3.1.5., C8.8.2.2., CP1.1.80.

metrics, C1.5.1., C1.5.1.1., C1.5.1.2., C1.5.1.2.1., C1.5.1.2.2., C1.5.1.2.3., C1.5.1.3.,
 C1.5.2.1., C1.5.2.2., C2.4.1.2., C3.3.2.4.2., C4.1.1.2.1., C4.4.1.2., C7.1.2.8., C7.3.1.2.1.,
 C7.3.1.4.1., C7.3.2.1.2., C8.6.1.1.9., AP13.1.7.

military mission essentiality (MME), C2.3.1.2., C2.3.1.2.2., C2.3.2.2., C2.3.2.3.,

C3.2.5.2.1.4., AP1.1.27., AP1.1.27.2., AP1.1.70., AP1.1.82., AP4.1., AP4.5.

missile, C5.7.4.2.3., C5.7.4.2.5., AP1.102.

model, C2.5.1.2.2., C2.5.1.3.1., C2.5.2.1., C2.6.2.2.2.2., C2.6.2.2.2.3., C2.6.2.2.2.4., C2.6.2.2.3., C2.6.2.2.4., C2.6.2.2.5., C2.6.2.2.6., C2.6.4.2.2., C3.3.1.2.1., C5.2.2.2.1., C8.6.2.2.2.11., AP1.1.145.

multi-echelon, C2.1.2.3.1.2., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.4., C2.1.2.3.1.2.

multi-indenture, C2.6.2.2.5.

N

national item identification number (NIIN), C8.4.2.5.1., AP1.1.88., AP1.1.89.

national stock number (NSN), C8.5.2.7.1., C8.5.2.8.1., C8.5.2.11.7., AP1.1.21., AP1.1.42., AP1.1.88., AP1.1.156., AP2.1.1.6.

nondevelopmental item (NDI), AP2.1.5.

nonrecurring demand, C3.2.5.2.6.

nonstocked, AP1.79.

O

obsolescence, C3.6.2.2.2.2., AP1.1.161., AP5.4.2., AP5.4.2.2., AP5.4.2.2.1., AP5.4.2.2.2., AP5.4.4.2.

operating level (OL), C2.6.4.1.2., C2.6.4.2.1., C2.6.4.2.2., C2.6.4.2.2.1., C2.6.4.2.2.2., C3.2.6.1.2., C3.2.6.2.1., C6.3.2.3., AP1.1.22., AP1.1.92., AP1.1.129., AP5.1.1., AP5.4.3.

order and shipping time (OST), C2.6.4.1.4., C2.6.4.1.6., C2.6.4.2., C2.6.4.2.3., C2.6.4.2.4.5., C3.2.6.2.1., AP1.1.93., AP1.1.129., AP3.1.3.4.

organic support, AP2.2.3.2.

P

packaging, , C5.5.2.3., C5.7.3.2.3., C5.7.7.2.3.4., C8.1.1.4.2., C8.7.1.2., C8.7.1.3., C8.7.1.4., C8.7.1.5., C8.7.1.6., C8.7.1.7., C8.7.2.1., C8.7.2.2., C8.7.2.4., C8.7.2.5., C8.7.2.6., C8.7.2.7., C8.7.2.8., C8.7.2.10., C8.7.2.11., C8.7.2.12., C8.7.2.13.,

C8.7.2.14., C8.7.2.16., C8.7.2.17., C8.7.2.18., C8.7.2.19., C8.7.2.20., C8.7.2.21., C8.7.2.22., AP14.1.3., AP14.1.3.1., AP15.1., AP15.1.1., AP15.1.5., AP15.1.7., AP15.1.8., AP15.2., AP15.3.1., AP15.3.2., AP15.3.3., AP15.3.4., AP15.4.6., AP15.A1.1., AP15.A1.1.2.1., AP15.A1.1.2.2., AP15.A1.1.2.3., AP15.A1.2., AP15.A1.4.1.2., AP15.A1.4.2.2., AP15.A1.6.7., AP15.A1.7.1.

performance, C1.2.3., C1.3.1.1., C1.3.2.1., C1.3.2.5., C1.4.2.7., C1.5.1., C1.5.1.1.1., C1.5.1.2.2., C1.5.1.2.3., C1.5.1.3., C2.1.1.1., C2.1.1.1.1., C2.1.1.2., C2.2.1.2., C2.2.1.4., C2.2.2.4.1., C2.2.2.6.1., C2.2.2.6.2.1., C2.4.1.1., C2.4.1.2., C2.4.1.3.1., C2.4.2.1., C2.4.2.2., C2.4.2.2.1., C2.4.2.2.2., C2.4.2.5., C2.6.1.1.2., C2.6.1.1.4., C2.6.2.2.8., C2.6.3.1., C2.6.3.2.4.4., C2.6.4.1., C2.6.4.2.5., C3.1.1.2., C3.1.1.3., C3.1.2.1.1., C3.2.1.1.2., C3.2.1.1.3., C3.2.1.1.4., C3.2.1.2.1., C3.2.1.2.1.1., C3.2.1.2.1.2., C3.2.2.1.2.6., C3.2.6.1.1.1., C3.2.6.2.1., C3.3.1.1.1., C3.3.1.1.1.1., C3.3.1.1.1.2., C3.3.2.4.1., C3.5.2.3., C3.5.2.5., C3.6.1.4., C3.6.2.4.3., C3.8.1.4., C4.1.1.2.1., C4.3.1.2.4., C4.4.1.1., C4.4.1.2., C5.2.1.1.2., C5.6.1.2., C5.6.1.3., C5.7.5.1.2., C5.7.5.2.1., C5.7.5.2.7.5., C5.7.5.2.7.8., C5.7.7.2.3.8., C5.11.1.1., C6.1.1.1., C7.1.1.3., C7.1.2.8., C7.3.1.1., C7.3.1.2.3., C7.3.1.4.1., C7.3.2.1.1., C7.4.1.1.1., C8.1.1.4.2., C8.6.1.1.9., C8.6.1.2.2.2., C8.7.2.4., C8.7.2.8., C8.8.1.1.2., C8.8.1.6., C8.8.2.1.1., C8.8.2.4., AP1.1.57.1., AP1.1.60., AP1.1.96., AP1.1.97., AP1.1.154., AP2.2.2.1., AP4.3., AP4.3.1., AP8.1.1.2., AP9.1.4.7., AP11.3.1., AP11.3.7., AP11.4.1.2., AP15.A1.5.2., AP15.A1.6.4., AP15.A1.6.6.

performance-based arrangement, C3.2.1.1.4.

performance-based logistics (PBL), C1.2.3., C1.3.1.1., C1.3.2.1., C2.1.1.1., C2.2.1.1.2., C2.2.2.6.2.1., C3.2.1.1.3., C3.2.2.1.2.6., C3.2.4.1.4., C4.4.1.1., C7.4.1.1.2., AP1.1.97., AP1.1.107.

physical inventory control, C5.7.5.2.1., C5.7.5.2.6., C5.7.5.2.7.1., C5.7.5.2.7.2., C5.7.5.3.7.7., C5.7.5.2.7.8., C5.7.5.2.8.2., C5.7.5.2.9.1., C5.7.5.2.10., AP12.1., AP12.3.1.

pilferable item, C5.7.5.1.4.3., C5.7.8.2.4.

plan, C2.1.1.1., C2.2.2.3.1.2., 52, C3.6.2.2., C5.2.2.2.2., C5.2.2.2.3., C5.2.2.2.4., C8.2.2.1.2.2., C8.2.2.2.2.

potential reutilization, C2.8.1.1.1., C2.8.1.1.3., C2.8.1.1.4.

potential security assistance, C2.8.1.2.5.

Precious Metals Recovery Program (PMRP), C5.10.1.5.3., C5.10.2.1.

preservation, C5.7.6.1.4., C8.7.1.5., C8.7.2.2., C8.7.2.5. AP14.1.1., AP14.1.2.2.1., AP14.1.2.2.2.

price, C3.2.3.1.6., C4.3.2.2., C4.3.2.4., C5.5.2.3., C6.3.2.2., C6.4.1.3., C8.4.1.1., C8.4.1.2., C8.4.2.1., C8.4.2.2., C8.4.2.4., C8.4.2.5., C8.4.2.5.3., C8.4.2.5.4., C8.4.2.6., C8.4.2.6.1.1., C8.4.2.6.1.2., C8.4.2.6.1.3., C8.4.2.6.2., C8.4.2.6.4., C9.2.1.2.1., C9.3.6.2.1., C9.5.2.2.

price inquiry, C8.4.2.2.

principal item, C5.5.1.1., C9.1.2.2.1.1.1., C9.1.2.2.1.2.1., C9.1.3.6.2.2., AP1.1.137., AP16.T2.

priority, C2.6.2.2.3., C4.2.2.1.1.2., C5.3.1.4.2., C5.3.1.4.3., C5.3.1.4.7., C5.5.2.1.2., C5.5.2.1.3., C5.7.5.2.7.2., C5.7.7.2.3.2., C5.9.1.2.1., C6.1.2.2.4., C6.3.1.3., C8.3.2.3., C8.6.1.2.5., C8.8.1.2., C8.8.1.3., C8.8.1.6., C8.8.2.1., C8.8.2.1.2., C9.1.2.1., AP1.1.106., AP7.4.7., AP8.1.4., AP8.2.1.5., AP8.2.1.5.1., AP8.2.1.5.2., AP8.3.1., AP8.4.1., AP8.5.1., AP9.1.2.1.3.4.1., AP9.1.5.1.

priority designator, C5.3.1.4.2., C5.3.1.4.7., C8.8.1.2., C8.8.1.3., C8.8.2.1., C8.8.2.1.2., AP8.2.1.5.1., AP8.2.1.5.2. AP8.3.1., AP8.4.1., AP8.5.1., AP9.1.5.1.

product support, C1.3.2.9., C2.2.2.5.4., C3.3.1.1.2., C3.3.2.2., C3.6.2.2.2.1., C7.4.1.1., C7.4.1.2., C7.4.2.1.1., C7.4.2.3., AP1.1.97.

production lead time, C2.6.3.1.4.1., C2.6.3.2.4., C2.6.3.2.4.3., C2.6.3.2.4.3.2., C2.6.3.2.4.5., C4.3.1.2.4., AP1.1.1., AP1.1.108.

program manager, C1.3.2.1., C1.3.2.9., C1.5.1.2.3., C2.2.1.1.1.1., C2.2.1.1.2., C2.2.2.1.1., C2.2.2.5.4., C2.4.2.3., C2.9.2.3., C3.2.6.2.2., C3.3.1.1., C3.3.1.1.1., C3.3.1.1.2., C3.3.1.2.1., C3.3.2.4.1., C3.6.2.2.5.2., C5.2.1.1.2., AP1.1.157.

property accountability, C5.7.1.1.3.

provisioning, C2.1.1.1.2., C2.2.1.1.1.1., C2.2.1.1.1.2., C2.2.1.1.2., C2.2.1.2., C2.2.1.3., C2.2.1.4., C2.2.2.1.1., C2.2.2.1.2., C2.2.2.1.3., C2.2.2.2.1., C2.2.2.2.2., C2.2.2.4.1., C2.2.2.6.1., C2.2.2.6.2.1., C2.2.2.6.2.2., C2.2.2.6.2.3., C2.2.2.6.2.4., C2.5.2.4.1., C2.6.1.1.3., C2.6.3.2.4.3.3., C2.6.5.2.4.1., C3.2.6.1.1.3., C3.3.2.2., C4.2.1.1., C7.4.2.2.4., C8.1.1.2.2.2., C8.1.1.2.2.3., C8.5.1.2., C8.5.2.11.3., AP1.1.73., AP2.1.1.2., AP2.1.1.5., AP2.1.2., AP2.1.3., AP2.1.5., AP2.2.1.2., AP2.2.1.3., AP2.2.1.6., AP2.2.2., AP2.2.2.2., AP2.2.2.3., AP2.2.3.1., AP3.1.3.5.

Q

quality, C1.3.2.4., C2.1.1.2.1., C2.2.1.4., C3.1.1.2.2., C3.2.1.1.2., C3.3.1.1.3., C3.5.2.1., C3.5.2.3., C3.5.2.4., C3.5.2.5., C3.5.2.8., C3.5.2.9., C3.5.2.9.1., C3.5.2.9.2., C3.8.1.6.3., C5.2.2.1.3., C5.6.1.6., C5.7.5.1.2., C5.7.6.1.2.1., C5.7.6.1.2.2., C7.3.1.3., C8.5.2.11.4., C8.6.2.1.1.8., C8.6.2.2.2.10., C8.6.2.2.2.12., C8.7.1.1., C8.7.2.1., AP1.1.7.

R

readiness, C1.1.2., C1.2.3., C1.5.1.3., C1.5.2.2.1., C2.1.1.2.2., C2.1.2.3.3., C2.2.2.4.1., C2.2.2.4.1.1., C2.2.2.6.2.1., C2.3.1.3., C2.4.1.1., C2.4.1.3., C2.4.1.3.4., C2.4.2.2.1., C2.6.1.1.2., C2.6.1.1.4., C2.6.1.2.1., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.2.1., C2.6.2.2.2.2., C2.6.2.2.9., C2.6.2.2.9.2., C3.2.2.1.1., C3.2.5.2.2., C3.2.5.2.4., C3.2.5.2.8., C3.3.2.2., C3.3.2.4.1., C3.3.2.4.2., C3.6.1.2., C3.6.1.3., C3.6.1.4., C4.2.2.1.1.1., C5.7.3.1., C5.7.3.2.7.1., C5.7.7.1.2., C7.3.1.4.3., C8.2.1.2., C8.2.2.1., C8.2.2.4.1., C9.1.2.2.2., AP1.1.27.2., AP1.1.70., AP1.1.77., AP1.1.87., AP1.1.97., AP1.1.105., AP1.1.114., AP1.1.115., AP2.2.1.2., AP2.2.1.7., AP2.2.2., AP3.1.3.1., AP13.1.3.1.4.

readiness-based, C3.2.5.2.4., AP3.1.3.1.

readiness-based sparing (RBS), C2.2.1.2., C2.2.2.4.1., C2.2.2.4.1., C2.2.2.4.1.2., C2.2.2.4.1.3., C2.2.2.4.2., C2.6.1.1.4., C2.6.1.2.1., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.1., C2.6.2.2.2., C2.6.2.2.2.1., C2.6.2.2.2.2., C2.6.2.2.2.4., C2.6.2.2.3., C2.6.2.2.4., C2.6.2.2.5., C2.6.2.2.6., C2.6.2.2.9., AP2.2.2.

reason for stockage category (RSC), AP1.1.116., AP3.1.1., AP3.1.2., AP3.1.3.1., AP3.1.3.2., AP3.1.3.3., AP3.1.3.4., AP3.1.3.5., AP3.1.3.6., AP3.1.3.8.

receiving, C2.5.2.4.3., C2.6.3.1.4.1., C2.6.3.2.4.3.2., C3.1.1.2.4., C3.7.1.1., C3.8.1.3.2., C3.8.1.5.3., C3.8.1.6.1., C5.3.1.6., C5.6.1.1., C5.7.5.2.7.6., C5.8.2.7., C5.9.2.2., C6.1.2.2.7., C6.1.2.2.8., C6.4.2.2., C8.7.2.13., C8.8.2.2., AP1.1.23., AP1.1.34., AP1.1.94., AP1.1.108., AP1.1.117., AP1.1.162.

reclamation, C3.6.2.4.8., C5.10.1.1.1., C8.7.2.11.

recurring demand, C2.5.2.2., C2.5.2.4.1., C3.2.5.2.1.5., C5.3.1.1.5., C5.3.1.1.5.1., C5.3.1.1.5.2., C5.3.1.1.5.3., C5.3.2.2.

reorder point, C2.6.3.1.3., C2.6.3.2.1., C2.6.3.2.3., C2.6.3.2.4.2.1., C2.6.4.1.3., C2.6.4.2.1., C2.6.4.2.3., C2.6.5.2.4.2., AP1.1.119.1., AP1.1.119.2., AP1.1.122.

repair point, C2.6.3.1.5.2.

reparable item, C2.3.2.1.2., C2.6.1.2.3., C2.6.1.2.3.1., C2.6.1.2.3.1.2., C2.6.1.2.3.2., C2.6.1.2.3.4., C2.6.3.1.5., C2.6.3.2.2.4., C2.6.3.2.4.1., C2.6.3.2.5., C2.6.4.2.2.1., C2.6.4.2.4., C3.1.1.1., C3.4.2.3., C4.1.1.2., C4.2.1.1., C5.7.3.2.4.2., C6.3.1.1., C6.3.1.2., C6.3.2.1.2., C6.3.2.3., C6.3.2.5., C6.4.2.1., C7.4.1.1.1., C8.7.1.7., C9.1.1.5., AP1.1.30., AP1.1.43., AP1.1.74., AP1.1.119.1., AP1.1.119.2., AP1.1.120., AP2.2.1.6., AP5.4.1., AP6.3.5.1.1.

replenishment, C2.1.1.1.2., C2.2.2.2.2., C2.2.2.4.1.2., C2.6.2.2.2.4., C2.6.4.2.1., C2.6.5.1.1., C3.2.5.2.1.5., C3.4.1.4.2., C4.3.2.5., C4.5.1.1., C5.3.1.1.5.1., C5.3.1.4.2.1., C5.3.2.4., C8.3.1.2., C8.3.2.1., C8.3.2.2., AP1.1.91., AP1.1.92., AP1.1.93., AP1.1.119.1., AP1.1.126., AP1.1.136., AP2.2.3.2., AP2.2.3.5., AP2.2.3.6., AP5.3.1.

required delivery date (RDD), C2.6.3.2.4.6., C5.3.1.4.2., C5.3.1.4.2.1., C5.3.1.4.4., C8.8.1.2., C8.8.2.1., C8.8.2.1.2., C8.8.2.3., AP1.1.124. AP8.2.1.5.1., AP8.2.1.5.2., AP8.3.1., AP8.4.1.1., AP8.4.1.2., AP8.4.1.3., AP8.4.1.4., AP8.4.1.5., AP8.4.1.6., AP9.1.5.1.

readiness-based requirement, 162

requirement related munitions stock (RRMS), C9.3.2.1.1.1., C9.3.2.1.1.2., C9.3.2.1.1.3., C9.3.2.1.1.4., C9.3.2.2.1.1., C9.3.2.2.2.2., C9.3.3.2.2.,

requirements, C1.1.2., C1.1.3., C1.2.2., C1.2.3., C1.3.1.2., C1.3.2.2., C1.3.2.4., C1.3.2.7., C1.3.2.9., C1.3.2.10., C1.4.1.1., C1.4.2.1., C1.4.2.2., C1.4.2.3., C1.4.2.4., C1.4.2.5., C1.4.2.7., C1.5.1.1.1., C2.1.1.1., C2.1.1.1.1., C2.1.1.1.4., C2.1.2.3., C2.1.2.3.1., C2.1.2.3.1.1., C2.1.2.3.1.2., C2.1.2.3.3., C2.2.1.1.2., C2.2.1.1.3., C2.2.1.2., C2.2.2.1., C2.2.2.1.1., C2.2.2.1.1.1., C2.2.2.4.1., C2.2.2.4.1.2., C2.4.1.3.4., C2.4.2.2., C2.4.2.2.2., C2.5.2.2., C2.5.2.4., C2.5.2.4.1., C2.6.1.1.1., C2.6.1.1.2., C2.6.1.1.3., C2.6.1.1.5., C2.6.1.2.1., C2.6.1.2.2., C2.6.1.2.3.1., C2.6.1.2.3.2., C2.6.1.2.3.3., C2.6.1.2.3.4., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.2., C2.6.2.2.2.2., C2.6.2.2.2.3., C2.6.2.2.3., C2.6.2.2.4.3., C2.6.2.2.5.3., C2.6.2.2.7.2., C2.6.2.2.9., C2.6.2.2.10., C2.6.3.1., C2.6.3.1.1., C2.6.3.1.5., C2.6.3.1.4.2., C2.6.3.2., C2.6.3.2.1., C2.6.3.2.3., C2.6.3.2.4.3.2., C2.6.3.2.4.5., C2.6.3.2.4.6., C2.6.3.2.5.1., C2.6.3.2.5.2., C2.6.3.2.6.1., C2.6.4.1., C2.6.4.2., C2.6.4.2.2., C2.6.5.1.3., C2.6.5.2.3., C2.6.5.2.4.1., C2.7.1.3., C2.7.2.1., C2.7.3.1., C2.8.1.1.1., C2.8.1.1.1.1., C3.2.1.1.2., C3.2.1.2.1., C3.2.2.1.2.4., C3.2.2.1.3., C3.2.3.1.3., C3.2.3.1.4.2.2., C3.2.3.1.5., C3.2.4.1.3., C3.2.4.2.2., C3.2.5.1.1., C3.2.5.2.1.4., C3.2.5.2.1.5., C3.2.5.2.1.6., C3.2.5.2.1.7., C3.2.5.2.3., C3.2.5.2.4., C3.2.5.2.5., C3.2.5.2.6., C3.2.5.2.7., C3.2.5.2.8., C3.2.6.1.1., C3.2.6.1.1.3., C3.3.1.1.3., C3.3.1.3.1., C3.3.2.1.4., C3.3.2.6.3., C3.5.2.4., C3.5.2.5., C3.5.2.7., C3.5.2.9., C3.6.2.2.3., C3.6.2.2.4., C3.6.2.4., C3.6.2.4.4., C3.6.2.4.8., C3.6.2.7., C3.7.1.1., C3.7.1.3., C3.7.2.2., C3.7.2.3., C3.7.2.4.2., C4.1.1.1., C4.1.1.2.1., C4.1.2.1., C4.1.2.2., C4.1.2.3., C4.1.2.4., C4.1.2.5., C4.2.1.1., C4.2.2.1., C4.2.2.1.1., C4.2.2.1.1.1., C4.2.2.1.1.2., C4.2.2.1.2., C4.3.1.1., C4.3.1.2.3., C4.3.2.5., C4.4.1.2., C4.4.2.2.,

C4.5.1.2., C4.5.2.2., C5.1.1.1., C5.1.2.2., C5.1.2.4., C5.2.1.1.1., C5.2.1.2.1.,
 C5.2.2.1.1.2., C5.2.2.1.2.1., C5.2.3.1.1., C5.2.3.2.1., C5.2.3.2.2., C5.3.1.1.1.,
 C5.3.1.1.2., C5.3.1.1.2.1., C5.3.1.1.5.2., C5.3.1.1.5.3., C5.3.1.1.5.4., C5.3.1.4.1.,
 C5.3.1.4.4., C5.3.1.4.6., C5.3.2.4., C5.4.1.2.1., C5.4.1.3., C5.5.1.1., C5.5.1.4.,
 C5.7.3.2.1.2., C5.7.3.2.9.2., C5.7.4.2.2., C5.7.4.5.3., C5.7.5.2.1., C5.7.5.2.3.,
 C5.7.5.2.4., C5.7.5.2.8.4., C5.7.6.1.3., C5.7.7.2.3.9., C5.7.7.2.5.2., C5.7.8.1.2.,
 C5.10.1.1.1., C5.10.1.3., C5.11.2.1.3., C5.11.2.6., C6.1.1.3., C6.1.1.5., C6.1.2.2.4.,
 C6.1.2.2.5., C6.1.2.2.6., C6.3.1.1., C6.3.1.2., C6.3.2.1.1.1., C6.3.2.1.1.2., C6.3.2.4.,
 C6.4.1.3., C6.4.1.4., C7.1.1.1.1., C7.1.1.1.3., C7.1.2.6., C7.1.2.9., C7.3.1.1., C7.3.1.4.4.,
 C8.1.1.3.2., C8.2.2.1.2.2., C8.2.2.2., C8.5.2.7., C8.5.2.8., C8.5.2.11.4., C8.5.2.11.6.1.,
 C8.5.2.11.11., C8.5.2.12.2., C8.5.2.12.6.4., C8.6.1.1.10., C8.6.1.2.2.1., C8.6.1.2.2.2.,
 C8.6.1.2.4., C8.6.1.2.4.2., C8.6.2.1.1.1., C8.6.2.1.1.3., C8.6.2.1.2., C8.6.2.2.1.1.7.,
 C8.6.2.2.2.5., C8.6.2.2.2.9., C8.6.2.2.2.12., C8.7.1.3., C8.7.1.4., C8.7.1.5., C8.7.1.7.,
 C8.7.1.8., C8.7.2.2., C8.7.2.5., C8.7.2.8., C8.7.2.9., C8.7.2.13., C8.7.2.14., C8.7.2.15.,
 C8.7.2.16., C8.8.1.1.2., C8.8.1.4., C8.8.1.5., C8.8.2.1., C8.8.2.1.1., C8.8.2.3., C9.,
 C9.1.1.1., C9.1.1.4., C9.1.1.5., C9.1.2.1., C9.1.2.2., C9.1.2.2.1., C9.2.2.3.2., C9.3.1.1.1.,
 C9.3.1.1.2., C9.3.1.2.1., C9.3.2.1.1.1., C9.3.2.1.1.2., C9.3.2.1.1.3., C9.3.2.1.1.4.,
 C9.3.2.1.1.4.2., C9.3.2.2.1.1.1., C9.3.3.1.1., C9.3.3.1.3., AP1.1.2., AP1.1.4., AP1.1.7.,
 AP1.1.12., AP1.1.17.2., AP1.1.26., AP1.1.27., AP1.1.27.1., AP1.1.27.2., AP1.1.28.,
 AP1.1.53., AP1.1.58., AP1.1.64., AP1.1.73., AP1.1.75., AP1.1.86., AP1.1.90.,
 AP1.1.96., AP1.1.97., AP1.1.99., AP1.1.119.2., AP1.1.121., AP1.1.125., AP1.1.143.,
 AP1.1.148., AP2.1.1.8., AP2.1.3., AP2.1.5., AP2.2.1.2., AP2.2.1.3., AP2.2.1.4.,
 AP2.2.1.7., AP2.2.2., AP2.2.3.2., AP2.2.3.4., AP2.2.3.6., AP3.1.3.1., AP3.1.3.3.,
 AP3.1.3.5., AP3.1.3.7., AP4.4.4., AP5.3.3., AP6.1., AP7.3.4., AP7.4.2., AP8.1.1.2.,
 AP9.1.1.1., AP9.1.1.3., AP9.1.1.6., AP9.1.2.1.3.5.4., AP9.1.2.1.3.5.5., AP9.1.2.1.3.5.10.,
 AP9.1.2.1.3.6.3., AP9.1.2.1.3.6.4., AP9.1.2.1.3.6.5., AP9.1.2.1.3.7.3., AP9.1.2.1.3.7.4.,
 AP9.1.2.1.3.7.5., AP9.1.2.5., AP9.1.5.2., AP9.1.5.3., AP13.1.3.4., AP13.1.4.6.,
 AP13.1.4.6.2., AP13.1.6.7., AP13.1.6.10., AP13.1.7., AP14.1.2.2.1., AP14.1.2.2.2.,
 AP14.1.3.1., AP15.1.5., AP15.3.1.

demand-based, C2.2.1.2., C2.3.1.3., C2.6.2.1.1., C2.6.2.1.2., C2.6.3.2.1.,
 C2.6.3.2.3., C2.6.5.2.3., C3.2.5.2.6., AP1.1.27., AP1.1.27.1., AP3.1.3.2., AP3.1.3.3.

readiness-based, C3.2.5.2.4., AP3.1.3.1.xref xrefid="cp300">

requirements computation, C2.1.2.3.1.2., C2.4.2.2.2., C2.6.1.1.2., , C2.6.1.2.3.2.,
 C2.6.1.2.3.4., C2.6.3.1.5., C3.2.5.2.5., C5.3.1.1.5.3.

requirements determination, C2.2.1.2., C2.2.2.4.1., C2.2.2.4.1.2., C2.6.2.2.10.,
 C9.3.2.1.1.4.2., AP1.1.26., AP1.1.58., AP1.1.73., AP1.1.90., AP1.1.125., AP2.2.3.2.,
 AP5.3.3.

requirements objective, C2.6.3.1.1., C2.6.3.2.1., C2.6.5.2.3., AP1.1.119.2.

requisition, C2.4.2.2.2., C2.4.2.4., C2.5.2.1.1., C2.5.2.4.2., C2.6.2.2.4.2., C2.6.2.2.7.1., C2.6.2.2.7.2., C2.6.2.2.7.3., C2.6.4.1.2., C2.6.5.2.1., C2.6.6.2., C3.4.1.2., C3.6.2.2.4., C5.3.1.1.1., C5.3.1.1.2., C5.3.1.1.3., C5.3.1.1.4., C5.3.1.1.5., C5.3.1.1.5.4., C5.3.1.2., C5.3.1.4.1., C5.3.1.4.2.1., C5.3.1.4.4., C5.3.1.4.5., C5.3.1.4.7., C5.3.1.5., C5.3.1.5.1., C5.3.1.5.3., C5.3.2.2., C5.3.2.4., C5.5.1.1., C5.5.1.3., C5.5.1.4., C5.5.2.1., C5.5.2.1.2., C5.5.2.1.3., C5.7.8.1.2., C5.8.1.2., C5.8.2.2., C5.8.2.2.2., C5.11.2.1., C5.11.2.1.1., C5.11.2.1.2., C5.11.2.1.3., C5.11.2.1.4., C5.11.2.1.5., C5.11.2.1.6., C5.11.2.2., C5.11.2.3.1., C5.11.2.3.2., C6.1.2.2.5., C6.1.2.2.6., C8.8.1.1.2.1., C8.8.1.1.2.2., C8.8.1.2., C8.8.2.2., AP1.1.8., AP1.1.25., AP1.1.75., AP1.1.79., AP1.1.93., AP1.1.94., AP1.1.106., AP1.1.119.1., AP1.1.128., AP1.1.130., AP1.1.146., AP1.1.147., AP1.1.159., AP5.3.3., AP6.3.4.3.1., AP7.4.7., AP8.1.2., AP8.2.1.5.1., AP8.2.1.5.2., AP8.3.1., AP8.4.1., AP8.4.1.2., AP8.5.1.6., AP8.5.1., AP9.1.2.1.3.1., AP9.1.5.1., AP9.1.5.2., AP9.1.5.3.

requisitioning objective, C2.6.2.2.7.1., C2.6.4.1.1., C2.6.4.2.1., C2.6.5.2.4.2., C2.8.2.2., C5.5.2.1.2., C5.5.2.1.3., AP5.4.2.2.1.

resupply time, C2.6.2.2.6., C2.6.2.2.6.1., C2.6.2.2.6.2.

retail, C1.2.1., C1.3.1.5., C2.1.2.3.1., C2.1.2.3.1.2., C2.1.2.3.3., C2.2.2.5.1.1., C2.3.1.3., C2.3.2.8., C2.4.2.2., C2.4.2.2.2., C2.6.1.1.1., C2.6.1.1.2., C2.6.1.1.4., C2.6.1.2.3.3., C2.6.2.1.2., C2.6.2.2.4.2., C2.6.2.2.6., C2.6.2.2.6.1., C2.6.2.2.6.2., C2.6.2.2.7.1., C2.6.4.1., C2.6.4.1.2., C2.6.4.2., C2.6.4.2.1., C2.6.4.2.4., C2.6.4.2.5., C2.6.5.1.1., C2.6.5.2.1.2., C2.6.5.2.4., C2.8.2.1., C2.8.2.2., C3.2.2.1.2.3., C3.2.4.1.1., C3.2.4.1.4., C3.2.5.1.1., C3.2.6.1.1., C3.2.6.1.1.1., C3.2.6.1.2., C3.2.6.2.1., C3.2.6.2.2., C3.5.2.10., C3.8.1.1., C4.2.2.1., C5.1.1.2.2., C5.2.1.2.2., C5.2.2.1.1.2., C5.2.3.1.1., C5.2.3.1.2., C5.2.3.2.2., C5.3.1.1.2., C5.3.1.1.2.1., C5.3.1.1.2.2., C5.3.1.4.3., C5.5.1.4., C5.5.2.1., C5.5.2.1.1., C5.5.2.1.1.1., C5.5.2.1.1.3., C5.5.2.1.1.4., C5.5.2.2., C5.7.1.1.2.2., C5.7.7.2.3.1., C5.8.2.9., C6.1.2.2.9., C6.1.2.2.10., C6.2.1.1., C6.2.1.2., C6.2.1.3., C6.2.2.2., C6.2.2.2.1., C6.4., C6.4.1.1., C6.4.2.1., C6.4.2.2., C8.2.2.2.2.1., C8.2.2.2.2.2., C8.2.2.3., C8.7.2.15., C9.1.1.1., C9.1.1.1.5., C9.1.2.2., C9.2.1.1., C9.2.2.1.1.1., C9.2.2.1.2., C9.2.2.1.2.3., AP1.1.51., AP1.1.61., AP1.1.62., AP1.1.62., AP1.1.87., AP1.1.116., AP1.1.130., AP1.1.146., AP1.1.155., AP1.1.164., AP3.1.1., AP5.3.3.

retail assets or stock, C2.1.2.3.1.2., C2.6.1.1.2., C2.6.2.1.2., C2.6.2.2.6., C2.6.2.2.6.1., C2.6.2.2.7.1., C5.3.1.4.3., C5.5.2.1., C5.5.2.1.1.4., C6.4., C8.2.2.2.2.1., C8.2.2.2.2.2.

retail item manager, C2.6.4.2.

retention limit, C6.1.2.2.10., C6.4.1.1.

return, C2.1.1.1.3., C5.8.1.2., C6.1.1.3., C6.1.1.4., C6.1.1.5., C6.1.2.2.2., C6.1.2.2.4.,

C6.1.2.2.5., C6.1.2.2.10., C6.3., C6.3.1.2., C6.3.1.3., C6.3.2.1.2., C6.3.2.2., C6.3.2.3., C6.3.2.4., C6.4.1.1.4., C6.4.1.2., C6.4.1.3., C6.4.2.2., C8.3.2.3., C9.2.2.1.1.2.5., AP1.1.118., AP9.1.2.1.3.5.10., AP9.1.2.1.3.6.7., AP13.1.3.1.4.

reutilization, C1.2.1., C2.1.2.3.2., C2.8.1.1.1., C2.8.1.1.3., C2.8.1.1.4., C4.5.2.1., C5.10.2.1., C9.2.2.2.6., AP1.1.39., AP1.1.40., AP1.1.100., AP13.1.2.2.4.

S

safety level, C2.6.2.2.4.3., C2.6.3.1.3., C2.6.3.1.6., C2.6.3.2.3., C2.6.3.2.4.2.1., C2.6.3.2.6., C2.6.3.2.6.1., C2.6.3.2.6.2., C2.6.4.1.6., C2.6.4.2.3., C2.6.4.2.5., C2.6.5.2.3., C3.2.6.2.1., C8.2.2.2.5.2., AP1.1.119.1., AP1.1.119.2., AP1.1.126., AP1.1.129., AP1.1.158., AP2.2.2.3., AP3.1.3.3.

screening, C2.2.1.1.1.2., C2.2.2.2.2., C2.2.2.2.4., C3.6.2.2.2.2., C5.10.1.2., C5.10.1.3., C5.10.1.5.1., C8.3.2.2., C8.3.2.3., C9.2.2.2.6., AP1.1.39., AP1.1.120., AP2.1.1.2.

secondary inventory control activity (SICA), C2.9.2.4.

secondary item, 2, C1.3.1.2., C2.3.1.2., C2.3.2.4., C2.4.1., C2.4.2.2., C2.4.2.3., C2.6.1.1.2., C2.6.1.1.3., C2.6.1.2.1., C2.6.1.2.2., C2.6.3.2.4.4., C2.8.1.1.1., C3.5.1., C3.5.2.1., C3.5.2.3., C3.5.2.8., C3.7.1.1., C6.3.2.1., C8.1.2.1., C9.1.1.4., C9.1.2.2., C9.1.2.2.2., C9.2.2.1.1.2., C9.2.2.1.2., C9.2.2.1.2.2., AP1.1.133., AP3.1.1., AP4.1., AP4.4., AP5.4.2.2.1., AP6.1., AP16.2.2., AP16.2.2.

security, C2.6.3.2.2.2.2., C2.8.1.1.1.3., C2.8.1.2.4.2., C2.8.1.2.5., C3.2.4.1.1., C3.2.5.1.3., C3.4.1.3., C3.7.2.3., C4.4.1.1.1., C5.2.2.1.2.1., C5.3.1.1.1., C5.4.1.2.1., C5.6.1.1., C5.7.5.2.7.5., C5.7.8.1.1.2., C5.7.8.1.2., C5.7.8.2.1., C5.7.8.2.2., C5.7.8.2.3., C5.10.2.1., C8.6.2.2.1.1.7., C8.6.2.2.2.9., AP1.1.17.1., AP1.1.110., AP7.2.2., AP9.1.2.1.3.5.3., AP9.1.2.1.3.6.1., AP9.1.2.1.3.7.1., AP9.1.3.1., AP14.2.2.2.

security of materiel, C5.6.1.1.

serviceable return, C6.1.2.2.5., C6.1.2.2.6.

shelf-life, C2.2.2.1.2., C3.2.3.1.4.2.1., C3.2.4.2.3., C3.2.5.2.1.2., C4.5.1.3., C5.2.2.1.2.1., C5.7.7.1.1., C5.7.7.1.2., C5.7.7.1.3., C5.7.7.2.3.1., C5.7.7.2.3.2., C5.7.7.2.3.3., C5.7.7.2.3.4., C5.7.7.2.3.7., C5.7.7.2.3.10., C5.7.7.2.3.12., C6.4.1.1., C6.4.1.2.

shortage cost, C2.6.3.2.6., C2.6.4.2.5., AP1.1.65., AP1.1.158.

source, C1.3.2.3., C1.5.2.2., C2.1.1.1.3., C2.2.1.1.2., C2.2.2.4.1., C2.2.2.5.1.,

C2.2.2.6.1., C2.4.1.1., C2.6.3.1.5., C2.7.2.3.1., C3.2.6.1.1., C3.5.2.4., C3.6.2.4.1., C3.6.2.4.2., C3.6.2.4.3., C3.6.2.4.5., C3.6.2.4.9., C3.8.1.3.1., C4.2.1.2., C4.3.2.5., C4.4.1.1.2., C4.4.1.1.3., C4.4.1.1.3.1., C5.1.1.2.1., C5.2.2.2.1., C5.2.3.2.2., C5.5.1.1., C5.6.1.8., C5.7.2.2.1., C5.7.2.2.2., C5.7.2.2.3., C5.11.2.1.4., C6.2.1.3., C8.1.1.2., C8.4.2.6.1.3., C8.6.1.1.5., C9.2.2.1.1.2., C9.2.2.1.2., AP1.1.15., AP1.1.127., AP5.3.3., AP5.5.3., AP9.1.2.1.3.5.10., AP9.1.5.2., AP9.1.5.3.

source maintenance and recoverability (SMR), C2.3.1.1., C2.3.2.1., C2.3.2.1.2., C8.1.2.1., AP2.1.1.1.

special program requirement (SPR), C2.5.2.4., C2.5.2.4.1., C2.5.2.4.2., C2.5.2.4.3., C5.3.1.1.5., C5.3.1.1.5.3.

storage activity, C5.4.1.4., C5.6.1.1., C5.6.1.6., C5.7.1.1.2., C5.7.5.2.7.10., C8.8.1.5., AP8.1.4.2., AP8.1.4.3.3., AP8.4.1.1.

stratification, C2.8.1.1.4., C5.3.1.4.6., C6.3.1.1., C9.1.1.1., C9.1.1.2., C9.1.1.4., C9.1.1.5., C9.1.2.2., C9.1.2.2.2., C9.1.2.3., C9.2.2.1.2.1., C9.2.2.1.2.2., C9.2.2.1.2.3., C9.3.1.1.2., C9.3.1.2.2., C9.3.2.1.1.1., C9.3.2.1.1.4.2., C9.3.2.1.2., C9.3.2.1.1., C9.3.2.2.1.2.1., C9.3.2.2.1.2.2., C9.3.2.2.2.1., C9.3.2.2.3., C9.3.3.2.1., AP1.1.62., AP1.1.116.

supply chain, C1.1.2., C1.2., 3, C1.2.1., C1.2.2., C1.3.1.4., C1.3.1.5., C1.3.2.1., C1.3.2.5., C1.3.2.6., C1.3.2.9., C1.3.2.12., C1.4., 29, C1.4.1.1., C1.4.1.2.1., C1.4.2.6., C1.4.2.7., C1.5.1., C1.5.1.1., C1.5.1.1.3., C1.5.1.2., C1.5.1.2.1., C1.5.2.1., C1.5.2.2., C2.1.1.1., C2.1.1.1.3., C2.1.1.1.4., C2.1.1.2.1., C2.1.1.2.2., C2.1.2.2., C2.1.2.3., C2.1.2.3.1., C2.1.2.4., C2.4.1.3.1., C2.4.1.3.5., C2.5.1.4., C2.6.1.1.4., C2.6.3.1., C2.6.4.1., C3.1.1.2.2., C3.1.1.3., C3.2.1.1.4., C3.2.1.2.1., C3.2.2.1.3., C3.2.4.1.2., C3.3.1.1.2., C3.3.1.1.3., C3.3.1.2.2., C3.3.2.1.3., C3.3.2.2., C3.3.2.4.1., C3.3.2.4.2., C3.3.2.5., C4.1.1.1.1., C5.7.7.1.1., C5.9.2.8., C7.1.1.1.1., C7.1.1.3., C7.1.2.1., C7.1.2.2., C7.1.2.4., C7.1.2.5., C7.1.2.5.5., C7.1.2.6., C7.1.2.7., C7.1.2.10., C7.2.1.2.1.1., C7.3.1.1., C7.3.1.2.2., C7.3.1.2.3., C7.3.1.2.4., C7.3.1.4.2., C7.3.2.1.2., C7.4.2.2.5., C8.6.1.1., C8.6.1.1.8., AP1.1.46., AP1.1.145., AP13.1.7.

supply support, C2.2.1.1.1.1., C2.2.1.1.3., C2.2.2.3.1., C2.2.2.3.1.1., C2.2.2.3.1.2., C2.2.2.3.2., C2.3.2.1.1., C2.3.2.3., C2.4.1.2., C2.7.2.3.2., C2.9.1.2.2., C3.4.1.2., C5.11.1.2.2., AP2.2.1.4., AP2.2.1.4.1., AP7.4.6.

T

testing, C1.2.1., C1.4.1.2.3., C3.5.2.4., C3.5.2.5., C3.6.2.4.11., C4.1.1., C5.7.7.1.3.1., C9.3.2.2.1.1.1.

time definite delivery (TDD), C2.1.1.2.1., C2.4.2.4., C4.3.1.2.4., C8.8.1.1.2., C8.8.1.1.2.1., C8.8.2.1.1., C8.8.2.1.2., AP1.1.153., AP8.1.1., AP8.1.1.1., AP8.1.1.2., AP8.1.2., AP8.3.

total munitions requirements (TMR), C9.3.2.1.1.1., C9.3.2.1.1.3., C9.3.2.2.1.1., C9.3.2.2.1.1.1., C9.3.2.2.2.2., C9.3.4.1., C9.3.4.2.

U

Uniform Materiel Movement and Issue Priority System (UMMIPS), AP9., AP9.1.1., AP9.1.2., AP9.1.4., AP9.1.5., AP9.2.1., AP9.4.1., AP9.4.1.3., AP9.4.4., AP9.4.5., AP9.4.7., AP9.4.8., C8.8., C8.8.1.1., C8.8.1.1.1., C8.8.1.2., C8.8.1.6., AP1.1.45., AP1.1.106., AP1.1.159., AP7.4.7.

unique item tracking (UIT), C5.7.3., C5.7.3.1., C5.7.3.2.1.2., C5.7.3.2.1.4., C5.7.3.2.2., C5.7.3.2.3., C5.7.3.2.4., C5.7.3.2.4.1., C5.7.3.2.4.2., C5.7.3.2.5., C5.7.3.2.6., C5.7.3.2.7., C5.7.3.2.7.1., C5.7.3.2.7.2., C5.7.3.2.7.3., C5.7.3.2.7.4., C5.7.3.2.8.1., C5.7.3.2.8.2., C5.7.3.2.8.3., C5.7.3.2.9.2., C5.7.3.2.9.2.1., C5.7.3.2.9.2.2., C5.7.3.2.9.2.4., C5.7.3.2.9.4., C5.7.3.2.9.5., C5.7.3.2.10.1., C5.7.3.2.11., C7.2.1.2.3., C8.1.1.2.2.4., AP10.1., AP10.3.1., AP10.3.2., AP10.3.3., AP10.3.4., AP10.3.5., AP10.4.1.5., AP10.4.1.6., AP10.4.2.4., AP10.4.2.5., AP10.4.2.6.

unserviceable return, C6.1.2.2.1., C6.1.2.2.7., 104, C6.3.1.3., C6.3.2.1.1., C6.3.2.4., C6.3.2.5.

V

visibility, C1.3.1.5., C1.3.2.1.2., C2.1.2.3.1., C2.1.2.3.1.2., C2.1.2.3.2., C2.1.2.3.3., C3.1.1.2.4., C4.2.1.3., C4.4.2.2., C5.1.1.2.3., C5.1.1.3., C5.3.1.1.2., C5.3.1.1.2.2., C5.5.2.1.1.2., C5.5.2.2., C5.7.3.1., C5.7.3.2.4., C5.7.3.2.7.2., C5.7.3.2.9.2.2., C5.7.4.1., C5.8.1.4., C5.8.2.1., C5.8.2.9., C5.8.2.11., C5.10.1.1.2., C6.1.1.2., C6.3.1.3., C9.1.1.5., C9.3.2.1.2., AP1.1.57.3., AP15.A1.1.2.2.

W

war reserve, C2.5.2.4.1., C2.6.3.2.3., C2.7.1.1., C2.7.1.2., C2.7.1.4., C2.7.2.1., C2.7.2.2., C2.8.2.2., C3.2.5.2.8., C5.3.1.1.5.4., C5.3.1.4.6., C6.4.1.4., C9.3.2.1.1.3., C9.3.2.2.1.1.1., AP1.1.2., AP1.1.129., AP14.1.2.2.1.

weapon system, C1.2.1., C1.2.3.1., C1.3.1.1., C1.5.1.2.3., C1.5.2.2., C1.5.2.2.1., C2.1.1.2.2., C2.1.2.3.3., C2.2.1.1.1.2., C2.2.1.2., C2.2.1.3.1., C2.2.1.3.2., C2.2.2.2.3., C2.2.2.3.2., C2.2.2.4.1., C2.2.2.4.1.1., C2.2.2.4.1.2., C2.2.2.5.1., C2.3.1.2., C2.3.1.2.1., C2.3.2.4., C2.3.2.6., C2.3.2.7., C2.4.1.1., C2.4.1.3., C2.4.1.3.4., C2.4.2.2.1., C2.4.2.2.2.,

C2.5.2.1.2., C2.5.2.3., C2.6.1.1.2., C2.6.1.1.4., C2.6.1.2., C2.6.1.2.3.1.1., C2.6.2.1.1., C2.6.2.1.2., C2.6.2.2.1., C2.6.2.2.2., C2.6.2.2.2.1., C2.6.2.2.2.3., C2.6.2.2.3., C2.6.2.2.5.1., C2.6.2.2.5.2., C2.6.2.2.5.3., C2.6.2.2.6., C2.6.2.2.6.2., C2.6.2.2.7.1., C2.6.2.2.7.3., C2.6.2.2.8., C2.6.2.2.9.3., C2.6.3.2.6.1., C2.8.1.2.1., C2.8.1.2.2., C2.8.1.2.5., C3.1.1.1., C3.2.2.1.1., C3.2.4.1.1., C3.2.5.1.3., C3.2.5.2.3., C3.2.5.2.5., C3.2.6.2.1., C3.3.1.1., C3.3.1.1.1.1., C3.3.1.1.1.2., C3.3.1.1.2., C3.3.1.2.2., C3.3.1.3.1., C3.3.1.3.2., C3.3.2.1.1., C3.3.2.4., C3.3.2.4.2., C3.3.2.6.3., C3.6.1.1., C3.6.1.3., C3.6.1.4., C3.6.2.2.2., C3.6.2.2.5.2., C3.6.2.3., C3.6.2.7., C5.2.1.1.2., C5.2.1.2.1., C5.2.2.1.4., C7.3.1.4.2., C7.3.1.4.3., C7.3.2.1.1., C7.4.1.1.1., C7.4.1.1.2., C7.4.2.1.1., C7.4.2.2.2., C8.7.1.5., C9.1.1.3., C9.3.2.1.1.3., AP1.1.27.2., AP1.1.55., AP1.1.56., AP1.1.64., AP1.1.65., AP1.1.70., AP1.1.87., AP1.1.97., AP1.1.101., AP1.1.115., AP1.1.148., AP1.1.157., AP1.1.163., AP2.2.1.4.1., AP2.2.1.7., AP2.2.2., AP3.1.3.4., AP4.1., AP4.2., AP4.2.1., AP4.3., AP4.3.1., AP4.3.3., AP4.3.4., AP4.5., AP4.7.2.1., AP7.3.2.

X

Y

Z